

MASTERING ADOBE Ps PHOTOSHOP

2024

Transform From Novice to
Pro in Just 7 Days!



Mastering Adobe Photoshop

2024

Transform from Novice to Pro in Just
7 Days

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Welcome to Adobe Photoshop 2024

The latest release of Adobe Photoshop, known as version 25.0 or Photoshop 2024, was launched in September 2023. This update is significant for the widely used image editing software, introducing groundbreaking Generative AI capabilities that have the potential to transform the way people create and edit images. In addition to these impressive features, the new version includes enhancements such as the Contextual Task Bar and improved startup performance, making Photoshop 2024 more efficient and user-friendly than ever before.

What's new?

In this section, you will learn about the various new features that have been incorporated into the recently released version of Adobe Photoshop. With each edition comes an amazing upgrade and this year is not an exception.

Generative AI

- **Generative Fill:** Now you can add, enlarge, or totally take off content from your pictures in a non-destructive manner with the use of simple text prompts within the app in about 100 languages to get a much more real result that will come as a surprise, amusement and will also thrill you in a matter of split seconds.
- **Generative Expand:** In this edition, you can have your canvas expanded by the addition of some realistic content to the edges while ensuring that you keep perspective. Lighting, and also the style of the initial language used.

With what I have been able to experiment with the use of the Generative AI feature, I have completely come to terms with the fact that this new version is just like having a creative genie in your computer. You have no idea of how much you can do with Photoshop until you lay your hands on it and practice! With just some clicks you can design and enlarge images with the use of this tool. It is very user-friendly; all you have to do is insert your request and leave Photoshop to complete the rest of the magic! The AI can help to match various styles like a champ, and also ensure your

edits are a perfect blend with the rest of the main picture.

Here is the fun part though; an improved quality might lead to you accruing extra costs as regards generative credits (you will learn more about this when you get to use the application itself). Creative Cloud paid participants and those who get to subscribe for Adobe Express Premium can now have exclusive access to generative credits are an aspect of their various plans. Adobe Express, Adobe Firefly, Creative Cloud, or Adobe Stock subscription now has various monthly generative credits that offer you complete access to content creation characteristics provided by Firefly. Adobe also came with the introduction of the idea of Content Credentials which is a characteristic that helps with the enhancement of transparency and accountability when making use of Generative AI tools like Generative Fill and Generative Expand. Anytime a picture is created or modified with the use of these AI technologies and then sent in the form of PNG, JPG, or Save as Photoshop will instantly append Content Credentials to the picture.

Contextual Task Bar

An entirely novel floating taskbar that offers tools and commands that are pertinent to the activity you are now engaged in. You won't have to look for the tools you require, which will increase your productivity and efficiency. In Photoshop, the Contextual Task Bar is a huge game-changer. It is comparable to having a personal assistant in your workspace who provides the tools you require at the precise moment you require them. It maintains things organized and enables you to concentrate on developing rather than looking for alternatives. Definitely recommend!

New Interactions in Remove Tool

You can employ the use of the remove tool to design a loop around an object you would like to have disappeared as against brushing over it totally. With the use of this new interaction, there is no need for you to get the loop closed because Photoshop will aid in determining the distance to auto-connect the loop and get it filled. With this, the interaction will be less prone to causing errors and will also aid in saving so much time. Furthermore, if you create selections accidentally while getting an object in a circle, modify the stroke of the brush mode in the options bar from subtraction to

addition to ensure that corrections are created and established.

Other new features

- **Improved startup performance:** Photoshop starts up at a much faster pace than when it was initially designed. Now you can conclude work on your projects at a much faster pace.
- **Preset Sync:** there is now an instantaneous synchronization to presets across all of your devices so you will be able to gain access to your preferred presets anywhere you happen to be.
- **Improved Gradients:** Gradients are now really smooth and much more realistic and they also offer support for more hues and gradients.

The above-described features can only be enjoyed on the new Adobe Photoshop 2024, if you are unsure of the kind of Photoshop you have, you can get to know about this by navigating to the top menu of the Photoshop you have installed on your laptop and then click on Help > About Photoshop and if you are using a mac, click on Photoshop > About Photoshop.

CHAPTER 1

FEATURES OF ADOBE PHOTOSHOP 2024

The Future of Photoshop: Generative AI

Have a feel of the future with the most amazing Photoshop ever. Make use of the Generative Fill and Generative Expand for the addition, removal, or expansion of content in any picture with the use of Adobe Firefly. Do you need to change your image by adding things to your scene? Would you like to change the backdrop of your image? Or, more specifically, would you like to expand the background of your photograph? If you are answering yes to the above questions, then Generative Fill is the ideal feature for you as it has been created for these and a whole lot more. Generative Fill: Based on your natural creativity, this unique and enchanted new feature of Firefly-powered, generative AI capabilities allows you to add, enlarge, or remove material from your photographs without causing any damage using short text instructions in more than 100 different languages. Use this function to get results that are realistic and instantly surprise, thrill, and astound you. It will automatically match the perspective, lighting, and style of your image.

Given that the new material is developed in a generative layer, you can explore a wide range of creative options and undo the effects whenever you like without affecting your original image. Then, you may use Photoshop's strength and accuracy to further enhance your image, going above and beyond your own expectations. You can create with confidence while using Generative Fill since it is driven by Adobe Firefly, a collection of creative generative AI models designed to be safe for commercial usage, allowing you to confidently push the boundaries of your creativity. Firefly has been trained on hundreds of millions of professional-grade, licensed, high-resolution photos from Adobe Stock, which are among the best available.

With the use of Generative Fill, you are able to;

- **Generative objects:** choose an aspect of your image, and then make an instance of what you would like to add or take off with the use of a text prompt.

- **Generative backgrounds:** choose the background at the back of your subject, then produce a new scene from a text prompt.
- **Expand Images:** enlarge the canvas of your picture, and then produce a selection of the empty space. Producing without a prompt will result in the production of a harmonious continuation of your scene. The employment of a prompt will aid in the addition of material to your photograph while enlarging the remainder of your scene.
- **Remove objects:** choose the object you would like to take away, then generate it without the use of a prompt and watch it leave.

It should be noted that Generative Fill is a very versatile and fantastic function. Play with out-of-the-box ideas, brainstorm around numerous concepts, and quickly develop diverse alternatives.

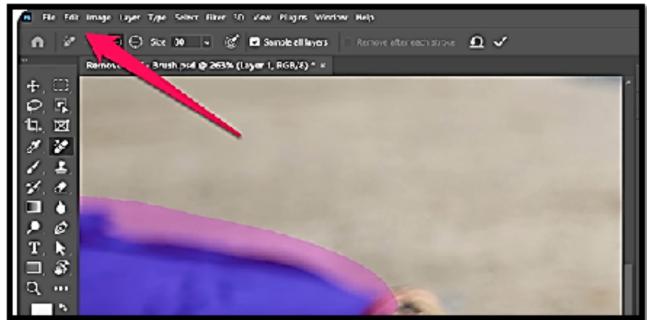
Generate an object

Make a choice of a part of your image, then make a description of what you would like to include;

- **Make a selection:** make use of any selection tool in Photoshop to create a selection around your preferred object or a part in your picture.
- **Access Generative Fill:** Whenever the Contextual Task Bar appears for the first time, a notification will appear displaying the Generative Fill option.

In the Contextual Task Bar, click the Generative Fill button. You can also select Generative Fill from one or more of the following options;

- Choose Edit > Generative Fill from the application bar.



- Ctrl/Right + Click with a selection active and navigate to the menu then pick Generative Fill.
- A legal dialog will be shown when you choose Generative Fill. Choose Agree to give consent to the User Guidelines and Cancel to take off the dialog.
- **Add your text prompt:** In the Contextual Task Bar, a text-entry prompt will appear where you can write about the object or scene you want to generate in your image in almost 100 languages. You are not required to do anything and may decide to leave this selection blank. If you choose to leave it blank, Photoshop is going to help you fill in the selection based on the surroundings. The description's text prompts inputs can be utilized in more than 100 different languages. For optimum results, substitute informative text suggestions like "fill the area" or "create a scene" with descriptive nouns and adjectives. Behind the scenes, a system translates non-English prompts into English.
- **Generate variations:** In the Contextual Task Bar, upon the completion of your text prompt, chooses Generate.
 - In the Properties Panel and, if applicable, the Generative Fill dialog, you will see thumbnail illustrations of the variations that are generated based on your text prompt.
 - In the Layers panel, a new Generative Layer will be created. You are able to select this layer to open the Properties panel, which will reveal your text prompt, mask, and variants. This allows for the depletion of a plethora of creative possibilities as well as the ability to remove effects anytime you feel the need for them without affecting your original image.
- **Generate more variations:** If you want to generate more versions, go back to the Properties page and select Generate

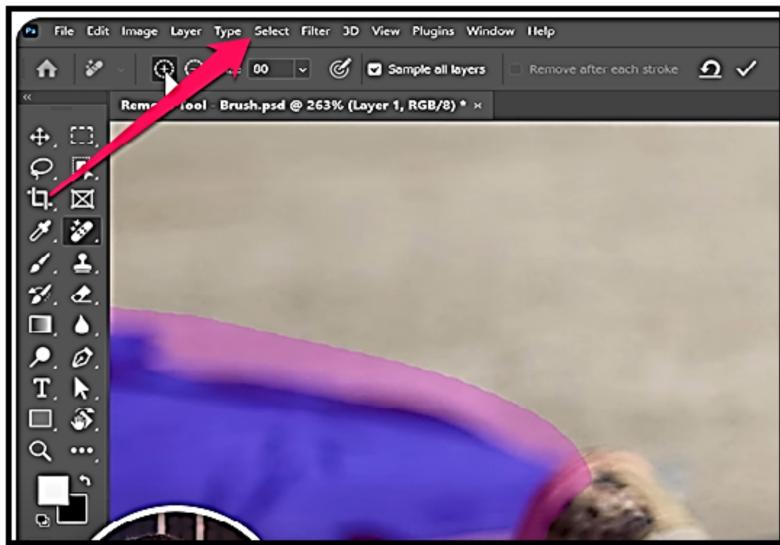
again. You may also change the text in the prompt box and then select Generate to create new versions using the amended content.

You are now able to see the variants in the Properties section and select the thumbnail image to see how they look on your image.

Generate backgrounds

Choose the background at the back of your subject, and then produce a new scene with the use of a text prompt.

- To get this done, choose Select



- Subject, then pick Select > Inverse. Once you have done that, repeat steps 2 through 5 from the Generate an Object aspect. You can also decide to Select Subject > Invert Selection > Text Prompt > Generate (all in the Contextual Task Bar).

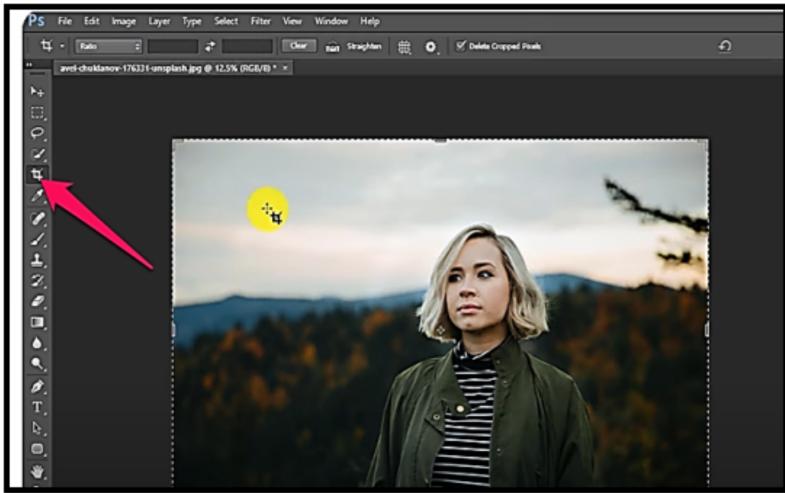
Expand images

Expand the canvas of the image before selecting the empty region and applying Generative Fill. Using Generative Fill without a prompt will result in a seamless enlargement of your image. The most straightforward method for adding generative content to a

blank canvas is generative expand, however, you can also make use of generative fill instead of it.

Employ the use of Generative Fill for the addition of generative material by following these steps.

- Choose the Crop tool from the toolbar. Get the borders display cropped on the edges of the picture.



- Move the corner and edge handles in an outward manner in order to bring about the expansion of the size of your canvas.
- Tap Enter/Return on your keyboard or hit the commit check, and then check the Crop box in the options bar. The additional canvas will utilize your backdrop color by default.
- Employ the use of the Rectangular Marquee to choose the extra canvas by selecting and moving to make the selection.
- Follow the steps 2-5 from Generate an object section discussed above.

However, if you'd like the selection to be filled based on the pixels surrounding it in your image, leave the text-entry request box empty before clicking Generate.

Remove objects

Choose the object or objects you wish to get rid of, and then let generative AI technology make them vanish. After selecting Generate, if you want the selection to be filled based on the area in

your image, leave the text-entry prompt box empty. When you first open the app, a quick tutorial will walk you through how to change a scene using a preloaded asset, allowing you to experience the potential of Generative Fill.

Work using a contextualized, interactive learning experience that includes a collection of movies to help you come up with variations. Additionally, you can pick from sample prompts to select the most pertinent, rely on visually-based tooltips to explain how selection size affects the generated content, and check the Properties panel at the beginning of the experience.

Generative credits in Photoshop

As part of their ambitions, Creative Cloud paying customers and Adobe Express Premium users now have access to generative credits. Monthly generative credits for Firefly-powered content creation tools have been added with your Creative Cloud, Adobe Express, Adobe Firefly, or Adobe Stock membership. Keep creating even though you might notice reduced generation speeds if you happen to hit your limit; you won't be charged any additional fees. Additionally, free Creative Cloud users receive a monthly creative credit allocation. When you've used up all of your monthly generative credits, you may either wait until the following month, when your credits are reset, or you can sign up for a premium subscription to keep producing Firefly-powered outputs.

Last but not least, this version of Photoshop gives you access to an ethically sourced generative AI model through Adobe Stock. Through projects such as the Content Authenticity Initiative and the Coalition for Content Provenance and Authenticity, Adobe advocates for responsibility, accountability, and transparency in generative AI and Firefly. Photoshop will consequently add Content Credentials to images produced with Generative Fill and Generative Expand and transfer as PNG, JPG, or "Save as" to let you and others know an image was created or altered in Photoshop using Firefly's generative AI technology.

Tools, Options, and Contextual Taskbar

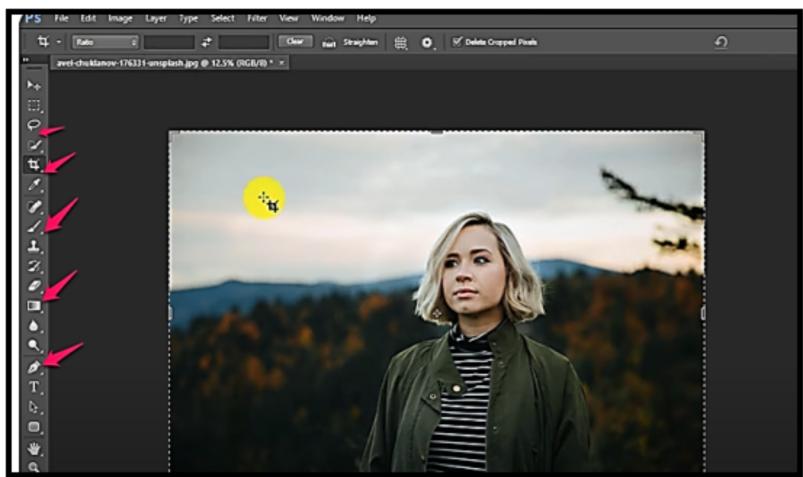
The tool panel is usually displayed on the left side of the application screen in Photoshop. These tools possess more choices that can be

seen in the context-sensitive options bar. Choose the little triangle that can be found at the lower right of the tool icon for you to gain access to these choices. Check out their names and any other information by placing the pointer over them.

Select a tool

Do any of the following to choose a preferred tool for use;

- Choose a tool in the panel containing tools. If there is a little triangle at the lower right corner of the tools, press and hold down the mouse button to see the button for tools, and then choose the tool you would like to make use of.



- As an alternative, you can choose to touch the keyboard shortcut for tools. The shortcut can be seen in the tooltip. For instance, if you would like to drag a tool all you have to do is press V.

You should be aware that whenever you hit and hold a shortcut on the keyboard key, Photoshop quickly changes to the tool you are currently using. As soon as you release the key, Photoshop returns to the original tool.

Journey through hidden tools

Custom wise, you move through certain hidden tools when you hold down the Shift key and continually press a tool shortcut key. If you would prefer to move through tools and not hold down the

shift key, you can choose to get this preference disabled.

- Tap Edit > Preferences > General (Windows) or Photoshop > Preferences > General (MacOS).
- Deselect Use the Shift Key for Tool Switch.

Change tool pointers

Each standard pointer has a distinct hotspot that indicates the start of an effect or activity in the picture. With a great deal of tools, you can switch to highly accurate cursors, which appear as crosshairs centered on the hotspot. When you select a tool, you usually get the same pointer that displays on the tool's icon. For marquee tools, the cross-hair pointer is the standard pointer, for text tools, the I-beam, and for painting tools, the Brush Size sign is the default pointer.

- Pick Edit > Preferences > Cursors (Windows) or decide to choose Photoshop > Preferences > Cursors (macOS)
- Pick tool pointer configurations beneath Painting Cursors or Other Cursors and then choose OK.
 - **Standard:** shows pointers as tool icons.
 - **Precise:** shows pointers as crosshairs.
 - **Normal Brush Tip:** The outline is a correspondent of about 50% of the aspect that the tool will affect the most. This choice will display the pixels that would be visibly affected the most.
 - **Full-Size Brush Tip:** The outline of the pointer corresponds to almost 100% of the area that the tool will impact or nearly all of the pixels that will be impacted.
 - **Show Crosshair In Brush Tip:** this shows crosshairs in the middle of the brush shape.
 - **Show Only Crosshair While Painting:** helps to get the performance better with the use of large brushes.

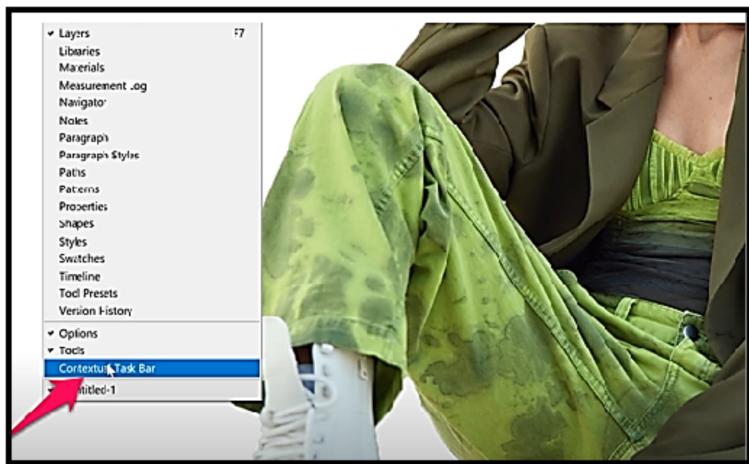
Tool Options bar

The tool options bar is shown beneath the menu bar at the top of the workspace. Because it is context-sensitive, the choices bar alters when another tool is selected. The options bar offers both universal and tool-specific parameters. Painting modes and opacity, for example, are shared by numerous tools. You can dock the options bar to the top or bottom of your display and drag it around the workspace with the gripper bar. When you hover the pointer across

a tool, tool suggestions appear. To view or conceal the options bar, go to Window > Options. To reset a tool to its initial configuration, right-click (Windows) or Control-click (MacOS) the tool symbol in the options bar, then select Reset Tool or Reset All Tools from the context menu.

Contextual Taskbar

The Contextual Taskbar, a recurrent menu, displays the most relevant next steps in your workflow. When an object is selected, the Contextual Task Bar appears on the canvas, displaying more curated options such as Select and Mask, Feather, Invert, Create Adjustment Layer, or Fill Selection. Navigate to Window > Contextual Task Bar to switch off this feature because it is usually turned on by default.



New document workflow

This bar appears when you open a freshly created, empty document from the Photoshop start menu or File > New.

Open image/file workflow

This bar appears when you start a picture or file from the home screen (rather than a fresh, empty document) or by selecting File > Open.



Type tool workflow

When you select the Type tool using the toolbar and place a text box on the canvas, this bar appears.

Selections workflow

After making a selection, this bar displays options for refining it or drawing a mask. You can also choose to employ the Generative Fill option once you've made your pick.

More options menu

Select the three-dot symbol to see the additional options menu, which includes options to hide, reset, and pin the task bars. These actions are made available to all bars in a way that ensures that a pinned bar will continue to be pinned on subsequent bars in your workflow, and hiding a bar will also aid in the maintenance of all concealed bars until they are reopened.

- **Hide bar:** Take off all Contextual Task Bars from your screen. You can reopen them by moving to Window > Contextual Task Bar.
- **Reset bar position:** The Contextual Task Bar drags alongside as you are working on the canvas, helping to keep tools that are still quite useful at your fingertips. Make use of the “more options menu” to reset the position of the bar.
- **Pin Bar position:** Pin and unpin any Contextual Task Bar

from the “more options menu”. When you pin, it will help with the holding of your bar and all subsequent bars created where they are being positioned. De-select the Pin bar position from the “more options menu: if you would like to get a bar unpinned.



You can work on your masking and generative expand workflows using the Contextual Task Bar's new enhancements, available with the release of Photoshop 25.0.

Masking workflow

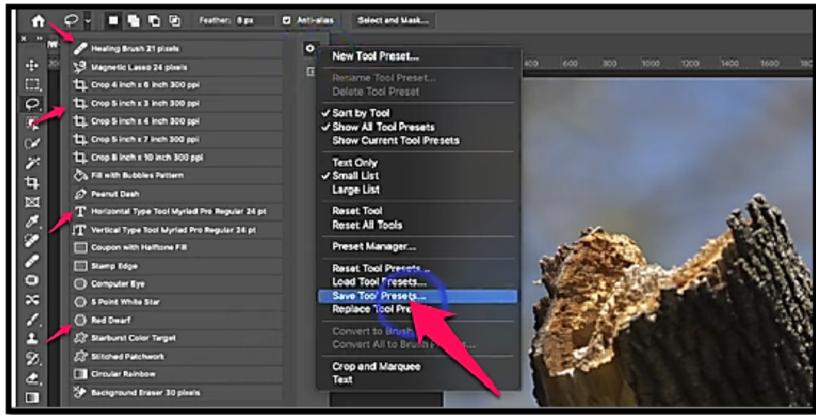
This bar is shown anytime you insert the Select and Mask workspace, design a mask from a selection, or choose a layer mask thumbnail. Make use of this bar for refining your mask by the addition or subtraction from your masked portion, view mode options, and modifying options for density and feather.

Generative Expand workflow

This bar is shown when the Crop tool is used and has choices to help straighten and modify the ratio. You can also have a choice to make use of the Generative Expand feature if the canvas is enlarged as against being cropped.

Tool presets

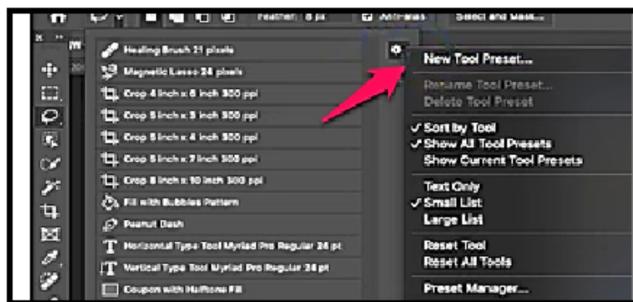
Presets allow you to save and reuse tool settings. You may load, edit, and construct tool preset libraries using the Tool Preset selection in the menu bar, the Tool Presets panel, and the Preset Manager. Select the Tool Preset selector in the bar containing options, then pick a preset from the pop-up panel to select a tool.



Additionally, you can choose a preset from the Tools Presets panel by choosing Window > Tool Presets.

Create a tool preset

- Make your preferred choice of a tool, configure the options you would like to save as a tool preset in the bar for options;
- Do any of the following;
 - Choose the Tool Preset button close to the tool at the left side of the options bar.
 - As an alternative, you can also decide to click on Windows > Tool Presets to show the Tool Presets panel.
- Do any of the following;
 - Choose the Create New Tool Preset button.
 - As an alternative, you can also choose to click on New Tool Preset from the panel menu.



- Insert a name for the tool preset and choose OK.

Change the list of tool presets

Choose the triangle to launch the Tool Presets pop-up panel menu and make a choice of any of the following;

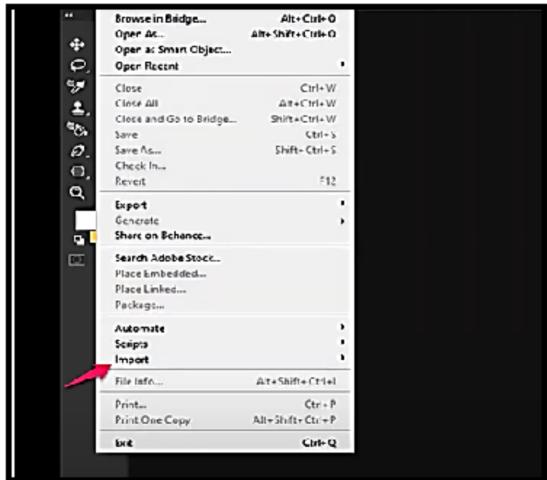
- **Show All Tool Presets:** this option displays loaded presets.
- **Sort by Tool:** this choice helps in the sorting of presets by tool.
- **Show Current Tool Presets:** This option only shows the loaded settings for the current tool. In the Tool Presets pop-up menu, you can additionally select Current Tool Only.
- **Text Only, Small list, or large list:** this option helps to determine just how presets are shown in the pop-up panel.

How to open photos

You can see from the name "Adobe Photoshop" that the application is all about photos. Photoshop is intended to allow users to develop and change raster images on several levels. These overlays or layers can offer transparency support and may be employed as well as masks or filters to affect the underlying pictures in the layers beneath them. Shadows, as well as other effects such as alpha compositing, can be added. There is also the option of adding different color models to these layers, including CMYK, RGB, Spot Color, Duotone, and Lab color space. In this section, you will learn how to open images that you would like to work on in Photoshop.

Open file

The Open and Open Recent commands can be used to open files. Additionally, you may import files into Photoshop from other Adobe programs including Bridge, Fresco, Lightroom, and Illustrator. In order to fully open certain files in Photoshop, such as camera raw and PDF, you must first provide settings and parameters in a dialog box. Users of Photoshop may open and alter 3D files, video files, and image sequence files in addition to still photographs. It is worth noting that Photoshop makes use of plug-in modules to launch and import various file formats. If a file format is not displayed in the Open dialog box or in the submenu of the File > Import, there may be a need for you to install the plug-in module of the format.



Photoshop might occasionally be unable to recognize the proper format for a file. For instance, the file may have been sent between two different operating systems if this occurs. The file format may occasionally be mislabeled during a transfer between Mac OS and Windows. In these situations, you need to specify the ideal format for opening the file. Note however that you can choose to keep layers, masks, frequency, compound shapes, slices, image maps, and modifiable type when you are bringing your Illustrator art into Photoshop. In Illustrator, get the art exported in the Photoshop (PSD) file format. If your Illustrator happens to have elements that aren't supported by Photoshop, the overall look of the artwork will be preserved, but the layers will be combined and the artwork will be left rasterized.

Open a file with the use of the Open command

- Pick File > Open.
- Choose the name of the file you would like to open. If the files do not show, choose the option for displaying all files from the Files Of Type (Windows) or Enable (Mac OS) pop-up menu.
- Choose Open. In certain cases, you will see a dialog box, enabling you to configure format-specific options.

Open a recently used file

- Select File > Open Recent, and then choose a file from the

submenu. Change the Recent File List Contains setting in the File Handling settings to define the number of files that will be displayed in the Open Recent menu. For Windows, select Edit > Preferences > File Handling, and for Mac OS, select Photoshop > Preferences > File Handling.

Make a specification of the file format in which the file should be opened

Photoshop might not be able to open a file if it was saved with an extension that doesn't correspond to its true format (for example, a PSD file saved with a.gif extension). By choosing the appropriate format, Photoshop will be able to identify and open the file.

- Do one of the following:

- (Windows) Choose File > Open As, and then choose the file you would like to launch. Then make a choice of the preferred format from the Open As pop-up menu, and choose Open.
- (macOS) Choose File > Open, and pick All Documents from the Show pop-up menu. Then choose the file you would like to open, make a choice of the preferred file format from the Format pop-up menu, and choose Open.

Note however that if the file does not open, the format you have chosen may not be a match to the correct format of the file or the file may be damaged.

Open PDF files

A flexible file format called Adobe Portable Document Format (PDF) can display both bitmap and vector data. It provides navigation and search tools for electronic documents. The default file type for Adobe Illustrator and Adobe Acrobat is PDF. A single image can be found in some PDF files, whereas others have numerous pages and images. You may select which pages or images to open when you open a PDF file in Photoshop and you can also set the rasterization choices. Additionally, you can import PDF data by dragging and dropping files, using the Paste command, and using the Place command. The page or image is added as a Smart Object to a different layer. Take into consideration the fact that the following procedure is just for the opening of generic PDF files in Photoshop. There is no need for you to indicate options in the

Import PDF dialog box when you have to open Photoshop PDF files.

Get the following done;

- Pick File > Open.
- In the Open dialog box, choose the file name, and then choose Open.
- Beneath Select in the Import PDF dialog box, pick Pages or Images, based on the elements of the PDF document you would like to bring in.
- Choose the thumbnails to make a choice of the pages or images you would like to open. To choose more than one page or image, tap shift-click. The amount of the items you choose will be shown beneath the preview window. If you are browsing in images, proceed to the eighth step.
- If you would like to give the new document a name, insert the name in the Name textbox. If you are bringing in more than one image or page, more than one document will open with the base name and then be accompanied by a number.
- Under Page options, make a choice from the Crop To menu to indicate the part of the PDF document to add;

Bounding Box: This option helps to crop to the smallest rectangular region that has all the text as well as the graphics of the page. This option deletes extraneous white space and any other document elements on the outside of the Trim Box. Media Box helps to crop to the initial size of the page. Crop Box helps to crop to the clipping region of the PDF file.

Bleed Box: helps to crop to the region indicated in the PDF file for accepting limitations that are in the production processes like cutting, folding, and trimming.

Trim Box helps to crop to the region indicated for the finished size of the page.

Art Box helps to crop to the aspect indicated in the PDF file for putting the PDF data into another application.

- Under Image Size, insert values (if need be) for Width and Height:
 - If you would like to keep the aspect ratio of the pages as they are scaled to ensure they are fit for the rectangle indicated by the breadth and height values, choose Constrain Proportions.

- If you would also like to scale the pages in an exact manner to the breadth and height values, deselect Constrain Proportions. There might be some distortion when the pages are eventually scaled.

When numerous pages are selected, the breadth and height text boxes display the ideal width and height of the chosen pages. If you select Constrain Proportions and do not change the Width and Height settings, all pages are shown at their initial dimensions. When the settings are changed, all rasterized pages will scale proportionately.

- Make an indication of the following choices beneath Image Size;
 - **Resolution:** Configure the resolution for the new document.
 - **Mode:** configure the color mode for the novel document.
 - **Bit Depth:** sets the bit depth for the novel document.

The values of the breadth and height as well as the Resolution help to determine the last pixel dimension of the resulting document.

- To help suppress the color profile indications, choose Suppress Warning.
- Choose OK.

Open an EPS file

Encapsulated PostScript (EPS), which can be processed by nearly all graphic, demonstration, and page-layout programs, may represent vector as well as bitmap data. Adobe Illustrator is the most commonly used program by Adobe for making PostScript artwork. When you open an EPS file containing vector art, the mathematically prescribed lines, and curves of the vector artwork are converted into the pixels or bits of a bitmap image.

Additionally, you can import PostScript artwork into Photoshop by using the drag-and-drop function, the Place command, and the Paste command.

- Select File > Open.
- Make a choice of the file you would like to open, and then choose Open.
- Show the preferred dimensions, resolution, and mode. If you

would like to keep the same height-to-breadth ratio, choose Constrain Proportions.

- If you would like to reduce lines that have been jagged at the artwork's edges, choose Anti-aliased.

How to save your work

Once you are done with the various edits you would like to perform on your pictures. There is definitely a need to have your picture saved to ensure that they are not lost in the process of you doing some other things on your laptop as this might mean you have to start all over again if your picture was not saved! It is however worth noting that the default file extension for a work in progress is referred to as. PSD (Photoshop Document). A PSD file has a maximum of about 3000 pixels for the breadth and also height and it also has a file length limit of 2 gigabytes. One other type of Photoshop file is.PSB (Photoshop Big) is simply a large document format and has the ability to extend the PSD's maximum height and width limit to 300,000 pixels and also helps with the extension of the length to about 4 exabytes.

Depending on the format you prefer to use or how you want to access the changes you have made to your images later, you may use the Save commands in Photoshop to save the changes you have made to your images to your documents. Locate the File menu and choose one of the Save commands from the list, which includes Save, Save As, or Save a Copy, to save a file in Photoshop. You have the option to save your content on your computer or to the Creative Cloud when selecting your desired saves command.

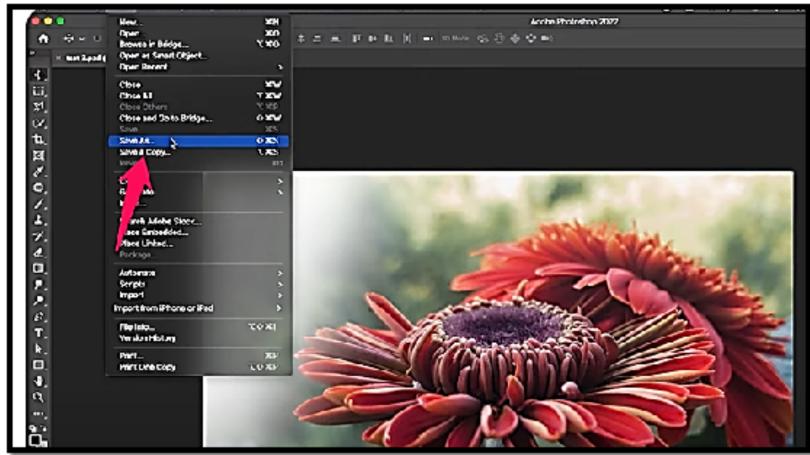
Save

To get the various changes you must have made to your file saved and to also ensure it is saved in the current format you are using, pick File > Save.

Save As

If you would like to save a file with another name, format, or even location; get the following done;

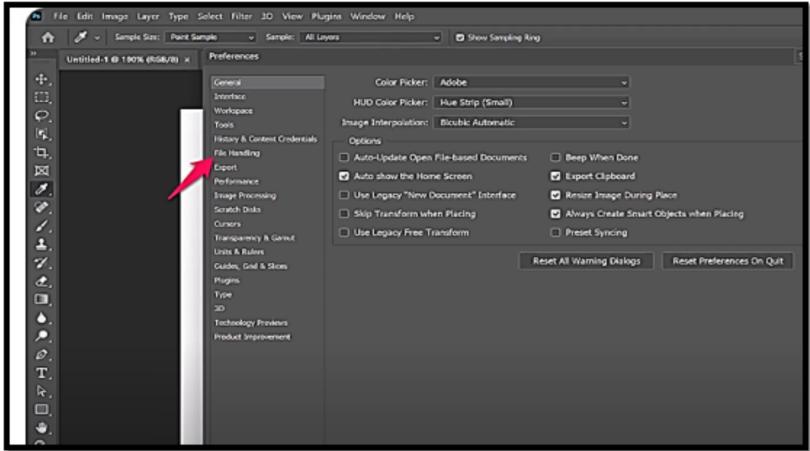
- Click File > Save As.



- Make a choice of a format from the Format menu.
- Indicate your preferred name for the file and also the location you would like to get the file saved.
- In the dialog box of the Save As option, choose saving options.
- Choose Save. Once this has been done, a dialog box will be displayed so you can make a choice of options in some picture formats.

The default setting for storing files in the most recent version of Photoshop is to store them locally on your computer rather than to the Creative Cloud. When creating the novel documents from any of the preferred places listed below, you can opt to set the Default File Location as On your Computer to see the local path:

- **Windows:** Edit > Preferences > File Handling



- **macOS:** Photoshop > Preferences > File Handling

If you would like to return to the custom Save As workflow and/ or choose to leave out the addended “copy” when having to save as a copy if needed.

To locate these preference choices, locate;

- macOS Photoshop > Preferences > File Handling > File Saving
- Windows Edit > Preferences > File Handling > File Saving Options

Anytime you switch on the Enable legacy “Save As” preference;

- **macOS:** The Save As and Save a Copy options will together open the legacy save dialog allowing the option of Save As that was available in the earlier version of Photoshop which also includes the As a Copy checkbox. When the legacy process is activated, the Save a Copy option for storing your Photoshop file will automatically enable the As a Copy checkbox. You run the risk of overwriting files when using the traditional Save As method because "copy" is no longer interactively appended to the filename. When you enable the traditional "Save As" choice in preferences on macOS, a warning box highlights this danger. Because of this, when the preference to Enable legacy "Save As" is chosen, the preference to not attach "copy" to the file when storing a copy is also enabled. These preferences cannot be disabled

separately from Enable legacy "Save As."

- **Windows:** The Enable legacy "Save As" setting controls the Save workflow exactly as it did at first, including the interactive adding of "copy" to the file's multiple names when necessary. Therefore, when turning on the legacy choice in Windows, no warning indication will be displayed. Additionally, a caution message won't be displayed and you can turn on or off the preference option Do not attach "copy" to the filename when storing a copy because the traditional Save As procedure can help add "copy" to file names.

If the person using it is at risk of modifying files, the Do not attach 'copy' to filename while keeping a copy preference decides whether "copy" is appended to the file of your Photoshop project. By selecting this option, both the new Save a Copy and the legacy Save As choices will stop inserting the word "copy" to the end of file names when you save as a copy.

Save a Copy

It will be necessary for you to construct an updated copy of the document if you choose to save a layered file as a flat file. Additionally, utilize the Save a Copy choice for all of the forms if you can't find the one you want to use, such as JPEG or PNG, and then create a preserved version of your document.

To get the above done, pick;

- File > Save a Copy
- Save a Copy button beneath the Save As dialog box

File saving properties

Under the Save As and Save a Copy dialog box, you can select to set up several file-saving preferences. The file you are going to save and the selected file format determine which preferences are available.

- **Alpha Channels:** This option helps to save alpha channel information alongside the image. When this option is disabled, it takes off the alpha channels from the image that was saved.
- **Layers:** This option helps in the preservation of all layers in the image. If this option becomes disabled or unavailable, all

the layers that can be seen will then become flattened or merged based on the format chosen.

- **Notes:** Images get saved with the note in this option.
- **Spot Colors:** Gets spot channel information saved alongside the image. If this choice is disabled, it takes off spot colors from the image that has been saved.
- **Thumbnail (Windows):** this option helps to store thumbnail data for the file.
- **Use Lower Case Extension (Windows):** this option helps to ensure that the file extension is lowercase.
- **Image Previews options (Mac OS):** this option helps in saving thumbnail data for the file. Here Thumbnails will be displayed in the Open dialog box.
- **File Extension options (Mac OS):** helps to indicate the format that ought to be used for file extensions. Choose Append to include the extension of the format to the name of a file and also make use of Lower Case to enable the extension lowercase.

Saving large documents

In Photoshop, there are three file types available for saving documents with images up to 300,000 pixels in either dimension and greater than 30,000 pixels in either dimension. Just keep in mind that most other programs, even earlier versions of Photoshop, are not capable of handling files larger than 2 GB in size or graphics with more than 30,000 pixels in any direction.

Select File > Save As, and then make a choice of any of the following formats;

Large Document Format (PSB): This option allows for the support of files of any size. Although some plug-in filters are inaccessible if documents are larger than 30,000 pixels in either width or height, all Photoshop features are retained in PSB files. Photoshop CS and later are the only programs that currently support PSB files.

Photoshop Raw: this choice provides support for documents of any pixel dimension or file size, but it does not offer support for layers. Any large document that is saved in the Raw format of Photoshop is usually flattened.

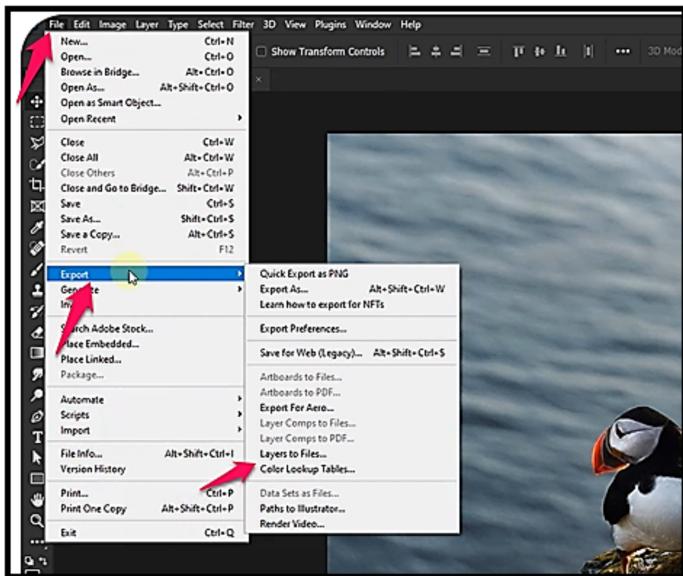
TIFF: with the use of this option, files of up to about 4 GB are supported. Documents that are larger than 4 GB will not be saved in

the TIFF format.

Export layers to files

Layers can be exported and saved as separate files in a number of different file types, which include PSD, BMP, JPEG, PDF, Targa, and TIFF. As they are stored, layers are automatically given names. Options to regulate name generation can be set.

- Pick File > Export > Layers to Files.



- In the dialog box of Export Layers to Files, beneath Destination, choose Browse to choose your preferred destination for the files that have been exported. The files that are generated are usually saved as the source file in the sample folder by default.
- Insert a name in the File Name Prefix text box in order to indicate a common name for the files.
- Choose the Visible Layers Only option if you just need to export the layers that have their visibility turned on in the layers panel. Use this option if you don't need to export all the layers. For layers that you don't want to be exported, turn off visibility.
- Choose your preferred file format from the File Type menu. Configure options as needed.

- Choose the Include ICC Profile option if you would like the working space profile included in the file that was exported. This is quite important for workflows that are color-managed.
- Choose Run.

What exactly is meant by Adobe Camera Raw?

If you have a need to alter and modify photographs swiftly in Photoshop, there is a need for you to have an idea of the concept of Camera Raw. At first glance, the interface of the Camera Raw in Photoshop looks a little bizarre. When you launch it, it looks much like there are so many sliders to move and buttons that ought to be clicked. Nevertheless, Camera Raw is actually quite easy and straightforward to use. In the sections below you will learn all that has to do with the use of Adobe Camera Raw so you can get to apply it judiciously whenever the need for it arises.

Adobe Camera Raw

The Adobe Camera Raw can simply be described as a plug-in piece of software that can be found in Adobe Photoshop. It allows you to make very swift and precise modifications to your pictures. It is important for you to know that the edits done by Adobe Camera Raw are usually in a non-destructive way. What this means is that it is quite easy for the changes to be reversed and your initial files will in no way be altered. Adobe Camera Raw can also be seen as an image processor that transforms raw information from the camera into an image. Photoshop can then alter the processed file. Adobe Camera Raw can be used in cropping, sharpening pictures, configuring white balance, adjusting contrast, making changes to both color and tonal range, and lots more.

What are Raw Images?

Raw files are pictures that are designed in a digital camera. They keep the unprocessed data taken from the image sensor of the camera. Raw files are quite larger in size when compared to their counterpart the JPEG files. They are also quite useful due to the fact that they have all of the initial image data. The amazing thing to note about raw files is that you can get back image details from them that you might not be able to get back from a JPEG file. This simply means that “unseen” information can be found in the file. As indicated above, raw files have the unprocessed, initial information

direct from the sensor of the camera. JPEG files are instantly processed in the camera. The amount of processing that goes on is not usually the same as it is always in accordance with the settings of the camera. Since JPEG files have been enhanced and compressed, when you get those images into Camera Raw, you are in a way altering pixels that have been processed already. What this means is that you probably don't have so much control and ability to locate the details that are hidden due to the fact that some of that data has been discarded during processing.

There is still a way for you to modify JPEG and TIFF files in quite a very effective manner with the use of the Camera Raw filter although it is quite worthwhile to have your editing done this way. If you would like to take Camera Raw images, configure your camera to keep files in its own Camera Raw file format. There are so many cameras that enable you to take Camera Raw and JPEG at the same time. The camera gives off image files for each shot taken.

Why should Camera Raw be used to edit pictures?

With the use of Camera Raw, you can swiftly modify and enhance raw files from your digital cameras. You are also able to edit JPEG and TIFF files in Photoshop with the use of the Adobe Camera Raw filter. One of the key advantages of modifying photos in Camera Raw as opposed to editing in Photoshop is the fact that Camera Raw does not alter or damage your initial picture totally. This is described as non-destructive editing. Furthermore, Camera Raw has certain editing characteristics that cannot be found in Photoshop. As pictures are being edited in your Camera Raw, the modifications are kept as a series of instructions that are added to your pictures. A live preview is usually displayed as you work. There is also room for you to return and make alterations just as you would, or you can also choose to totally reconfigure your modifications without having to harm any pixel. This is amazing!

File Formats and Camera Raw

Photoshop Camera Raw can be used to examine and modify a raw image file, but you are unable to save a picture in this format. However, you can also save the image in various image formats such as Photoshop (PSD), JPEG, TIFF, or Digital Negative (DNG). The Camera Raw plugin from Adobe receives regular updates. Be

sure to maintain your current version if you use Creative Cloud. By selecting Help > Updates, you can see if Adobe software needs to be updated.

Raw File Extensions

The data must be interpreted uniquely for each of the numerous various formats in which different camera manufacturers save Camera Raw photos. Numerous camera models are supported by Camera Raw, and it can decode a wide variety of Camera Raw file types. You might come across an unusual file extension that you've never seen before when you initially download your camera's photos.

Here are some of the most popular camera manufacturers' raw file extensions.

- .NEF-Nikon
- .CRW- Canon
- .ARW.SRF.SR2- Sony
- .PEF- Pentax
- .ORF-Olympus
- .3FR- Hasslebad
- .RW2-Panasonic

There are quite a lot more camera makers. Adobe often releases an update to Camera Raw to provide support to new cameras that can now be found in the market. If you have still been unable to successfully update the Camera Raw plug-in for currently supported versions of Adobe applications, make use of the Camera Raw 16.0 installer below.

Follow the set of instructions below to install the Camera Raw plug-in

Windows

- Close all Adobe applications.
- Click twice on the downloaded .zip file to have it unzipped. Windows may also unzip the file for you.
- Click twice on the resulting .exe file to commence the installer.
- Take after the instructions displayed on the screen.
- Restart your applications.

macOS

- Close all Adobe applications.
- Choose the downloaded .dmg file.
- Click twice on the .pkg file to commence the installer.
- Follow the instructions being displayed on the screen.
- Restart your Adobe applications.

Launching Photoshop's Camera Raw Format

In Photoshop, the Camera Raw dialog box allows you to open a camera raw file and make processing tweaks. After that, you may use Photoshop to open the edited camera raw image and perform standard image editing.

If you would like to launch raw images in Photoshop,

- Choose File > Open in Photoshop and then proceed to browse in order to choose camera raw files. Select Open Image to approve the changes made to the image after finishing editing it in the Camera Raw dialog box. This will launch Photoshop after the changed image has been saved. Instead of saving the modifications to the metadata of the original image, click Alt (Windows) or Option (Mac OS) to open a copy of the changed image. If you click Open Image while holding down Shift, Photoshop will open the picture as a Smart Object. By clicking twice on the Smart Object layer that contains the raw file, you can at any time modify the Camera Raw settings.

Save a camera raw image in another format

Camera files from the Camera Raw dialog box in PSD, TIFF, and JPEG, OR DNG format can also be saved. Within the Camera Raw dialog box, using the Save Image command places files in a queue to be analyzed and stored. This is quite helpful if you're processing multiple files at once in the Camera Raw dialog box and saving them all in the same format.

- In the dialog box of Camera Raw, choose the Save Image button in the dialog box of the lower-left corner.
- In the dialog box of Save Options, indicate the following choices;

- Destination indicates where the file ought to be saved. If need be, choose the button of the Select Folder and move to the location.
- File Naming indicates the name of the file with the use of a naming convention that has elements like date and camera serial number. With the use of informative file names depending on a naming convention aids in keeping image files well arranged.

- Select a file format from the Format menu. Digital Negative this option helps in saving a copy of the camera raw file in the DNG file format.

Compatibility

Indicates which versions of Camera Raw and Lightroom are compatible with the file. If you select Custom, be sure to indicate whether DNG 1.1 or DNG 1.3 compatibility is what you desire. Custom wise, the conversion employs lossless compression, which preserves all data while shrinking files. The image data is stored in an interpolated manner when Linear (Demosaiced) is selected. In other words, even if the software has no profile for the digital camera that took the picture, it can still read the file.

JPEG Preview

Add a JPEG preview inside the file of the DNG, if possible. If you decide to incorporate a JPEG preview, you can specify the size of the preview. Other apps can see the information inside of the DNG file while not having to parse the camera's raw data if JPEG previews are included.

Embed Original Raw File

Save all the original camera raw image data in the DNG file. JPEG allows you to save copies of your camera's raw files in JPEG format. Insert a figure between 0 and 12 or select an option from the menu to indicate the level of compression. Inserting a greater value, or selecting high or Maximum, provides less compression and boosts the file size and image quality. JPEG format is commonly used in web photo exhibitions, slide shows, presentations, and other online resources to display photos and other continuous-tone images. TIFF (Tagged-Image File Format) material is used to store copies of

camera raw files. Indicate whether no compression, LZW, or ZIP file compression is required. TIFF is a versatile bitmap image format that is supported by virtually all paint, photo editing, and page-layout software. TIFF has better compression and interaction with other apps than PSD.

Activity

1. What are the new features in Adobe Photoshop 2024?
2. Open a photo in your Photoshop.
3. Save a photo you must have worked on.
4. What is Adobe Camera Raw?

CHAPTER 2

WHAT TO KNOW ABOUT PIXEL ART

Atari 2600, Sega Genesis, Nintendo Entertainment System, and early computer graphics all had an impact on millions of creative people and still do. This inspiration and sentimentality are used in pixel art. The specific visuals and emotional connotations of the pixelated design continue to be appealing despite the fact that modern graphics resolution is superior to what prior gaming systems offered.

Pixel art is not just made of pixels; it is an art that brings up the look of the early computer and the imagery of the video game. This also includes everything ranging from Pong to Sonic the Hedgehog. Since early video games had lower resolutions, it was nearly difficult to disguise the little rectangles that made up the worlds of Space Invaders; hence, pixel art arose out of necessity. Artists working on video games in the 1970s and 1980s felt compelled to produce and distill pictures to their core. Just a few red pixels would have suggested Mario's headgear and one or two pixels should be recognized as his face or hands.

Pixel art became more intricate in the 16-bit period of the 1990s, but the spirit remained consistent. Artists had a considerably larger canvas to deal with, but they were still working with individual pixels, each of which was designed to play a significant role in the development of the overall image.

Start drawing with pixels

Pixel art necessitates intense concentration. In contrast to a painter, who can use broad strokes, a pixel artist must pay great attention to the arrangement of every single unit in their image. A talented pixel artist is capable of simplifying a subject while retaining its fundamental shape. To get started on pixel art, there is a need for you to study the pixelated character you have an admiration for from the work of the previous artists. References from real life cannot be applied as nicely in pixel art as they are in some other digital art disciplines. There is a need for you to learn certain ways by which you can simplify complex shapes like hands or facial

expressions. Recreating historical pixel art can be a time-consuming task, but following the pixel path taken by a different artist can be enlightening. When dealing with pre-existing art, you should never pass it off as your own; always give acknowledgement to the creators.

When producing pixel art, you will undoubtedly spend a significant amount of time with the Pencil and Line tools. Pixel artists frequently use Fill and Brush tools in their work, but a single pixel may additionally make all the difference. When it comes to creating pixel art, having the ability to drag things intentionally and easily is crucial. Ensure you do not save your pixel art as JPG. PNG or GIF files are usually the best. It is a very common file and most times used as default, but the compression that JPG adds can bring about a compromise in the quality and also lead to a disruption of the pixel-by-pixel work done by the artist.

If you would like to create pixel art, there is a need for you to first;

- Have an understanding that pixels; tiny squares of just one color can make up quite a bigger picture. It's the very first and most important part of drawing pixel art.
- Make a firm determination on the resolution you want to replicate. Are you influenced by 8-bit or 16-bit graphics? Make a decision on the kind of style you want to work with ahead of time, as this will influence how you handle each subject.
- Make up your mind as regards the size you would like to use for your pixels. The smaller the pixel, the more potential it will have for more intricate detail.
- Make a choice of a color palette. Most pixel art uses fewer colors than contemporary high-resolution graphics to attempt to emulate the limited palette of earlier games that relied on juxtaposing two colors in order to create the illusion of a third.
- Design a grid and commence placing pixels.

Making pixel art in Photoshop

Creating pixel art in Photoshop is simple provided you configure a canvas optimized for the creation of the pixelated

images.

- Open a new canvas.
- Configure a grid, as against inches, select pixels.
- Alter subdivisions to just one.
- Alter the picture interpolation configuration to Nearest Neighbor (ensure that the edges are preserved).
- Make use of the Pencil tool for the preservation of the hard edges.

Once the above has been completed, you should be provided with a field of blank pixels where you will be able to design any retro image you like with the use of individual squares. By making use of these settings, you will also be able to avoid unwanted blur and blends.

Introduction to Photoshop's Pencil Tool

In Photoshop, the pencil tool can be used to draw patterns or lines, and it comes with sharp edges by default. Adobe Inc. developed and produced Photoshop, a raster image editor, for both Windows and Mac OS. Photoshop is a unique photo editor that is utilized by people from all areas of the design and creative industries. Photoshop is used for various things by even those who are not designers.

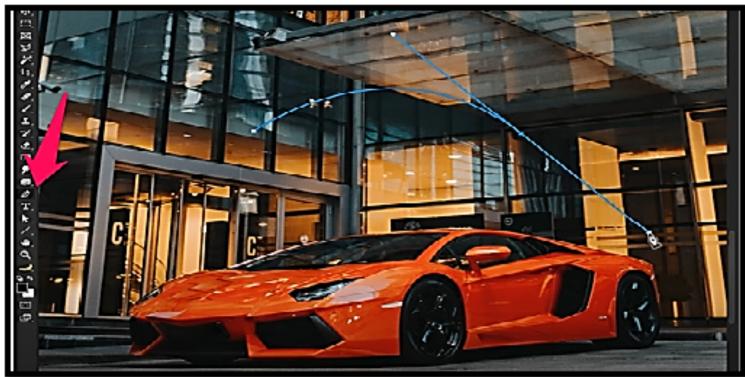
Even raster images can be created with Photoshop using numerous layers, masks, alpha compositing, and other color models including RGB, CMYK, spot color, duotone, and CIEL. The pencil tool in Photoshop functions similarly to a virtual pencil, allowing users to make designs or lines while changing the color, opacity intensity, pencil diameter, and further adjustments. Users can also experiment with different settings to improve the look of their project and produce original design artworks with a feel. The pencil tool is found in Photoshop's toolbar on the left. Users can then activate it and bring their imagination to life on the canvas.

Steps to use the Pencil Tool

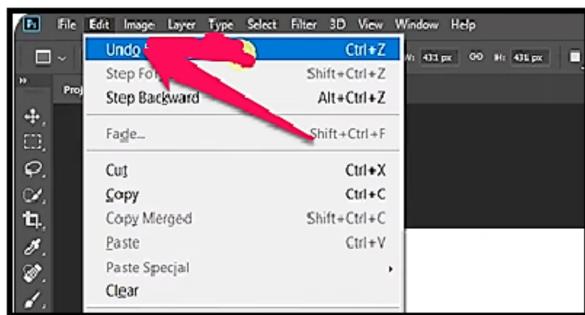
The simplest path you can get to draw with the use of the Pen tool is a straight line which can be drawn simply by clicking the Pen tool to make two anchor points. When you keep on clicking, you will make a path created with straight line segments and linked by

corner points.

- Choose the Pen tool.



- Place the Pen tool just where you would like to have the direct segment to start and select to make a definition of the initial anchor point (ensure you do not drag).
 - The initial segment drawn will not be seen until you choose another anchor point. If direction lines show, you have accidentally moved the Pen tool; select Edit > Undo, and then select and then click once more.



- Make a click again at the exact place where you would like to end the segment (shift-click to have a constraint of the angle of the segment to a multiple of 45 degrees).
- Proceed selecting in order to configure anchor points for more straight segments.

The final anchor point you include will be displayed as a solid square, showing that it is chosen. Previously stated anchor points become hollow, and deselected, as you include more

anchor points.

- Get the path completed by getting any of the following done;

- If you would like to close the path, place the Pen tool over the first (hollow) anchor point. A little circle will be displayed close to the Pen tool pointer when it is placed in the correct manner. Select or move it close to the path.
- If you would like to leave the path open, tap Ctrl + click (Windows) or Command-click (macOS) in any position away from all of the objects.
- To ensure the path is left open, you can also choose another tool, or tap select > Deselect. There is also an option for you to simply touch Enter or Return to ensure that the path remains open.

Draw curves with the Pen tool

You can construct a curve by adding an anchor point when a curve alters direction and moving the direction lines that create the curve. The length and slope of the direction lines influence the shape of the curve. Curves with as few anchor points as possible are easier to alter, and your computer can display and print them faster. Overuse of points can also result in unintentional bumps in curves. Instead, create anchor points that are far apart, and then practice generating curves by altering the distance and angle of the direction of the lines.

- Choose the Pen tool.
- Place the Pen tool at the very place you would like the curve to start, and hold down the button of the mouse. The initial anchor point will be displayed, and the Pen tool pointer will then transform into an arrowhead.
- Move the mouse to customize the slope of the curve segment you're building, and then release the mouse button. Basically, extend the line's direction approximately a third of the length to the following anchor point you intend to draw. Later on, you can change one or both sides of the direction line.
- Place the Pen tool just where you would like to have the curve segment to come to an end, and then do any of the following;

- If you would like to design a C-shaped curve, move in a direction that is opposite to the former direction line. Then let go of the button of the mouse.
- If you would like to design an S-shaped curve, move in the same direction as the former direction line. Then let go of the button of the mouse.
- Continue moving the Pen tool from different spots to create a plethora of smooth curves. It is important to note that you are placing the anchor points at the beginning and end of each curve rather than at the tip of the curve.
- **Complete the path by engaging in any of the following;**
 - If you would like to have the path closed, place the Pen tool over the first (hollow) anchor point. A little circle will be displayed close to the Pen tool pointer when it is placed correctly. Select or move close to the path.
 - To ensure the path is left open, Ctrl-click (Windows) or Command-click (macOS) anyplace away from all objects.

Draw straight lines followed by curves

- Make use of the Pen tool, and choose corner points in two locations to design a straight segment.
- Position the Pen tool at the highest point of the selected endpoint. Choose the anchor point and drag the displayed direction line to determine the slope of the curved segment you will generate next.
- Place the pen just where you would like to have the next anchor point; then choose the new anchor point to complete the curve.

Draw curves followed by straight lines

- Make use of the Pen tool, move to design the first smooth point of the curved segment, and let go of the button of the mouse.
- Change the position of the Pen tool where you would like the curved segment to end, move to complete the curve, and then let go of the mouse button.
- Place the Pen tool at the top of the chosen endpoint. A convert-point symbol will be displayed close to the Pen tool when it is placed in a correct manner. Choose the anchor

point to transform the smooth point to a corner.

- Change the position of the Pen tool where you would like the straight segment to come to an end and then make a click in order to complete the straight segment.

How to change Image Resolution using Adobe Photoshop

When it comes to digital photography, a resolution is simply referred to as the amount of detail included in an image. In addition, it can be defined as the number of pixels in that image. The greater the amount of information and definition you can see, the higher the resolution and the richer the pixel count. The resolution of a digital image is usually measured with the use of pixels; basically, pixels per inch are denoted as PPI. For printing, picture resolution is measured by dots per inch which is also denoted as DPI, which oftentimes refers to the little droplets of ink that are created by the printers.

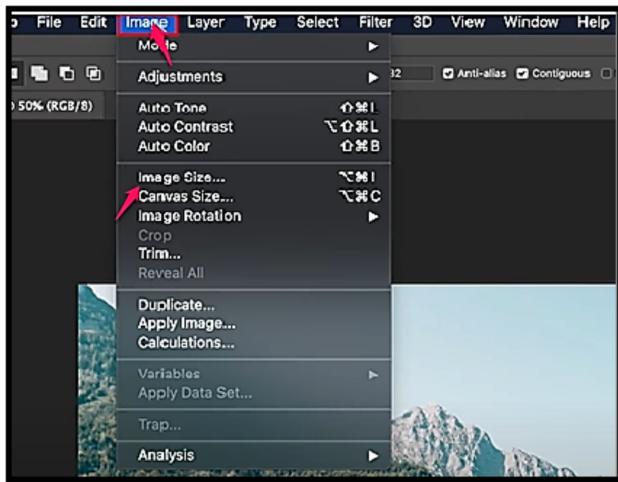
- The higher the resolution of the image, the more the pixels are fused together which then leads to a smoother and well-detailed image.
- The phrase “high-resolution” is most times used in sync with the quality of the images such as vivid, crisp images are what people often associate with the fact that a picture is good. Nevertheless, it is quite important to remember also that the resolution is just a single factor that can affect the quality of an image, there are other factors and you will learn about them as you read on.

The term resolution can also be utilized across various other industries in the determination of the details of an asset which includes;

- TV
- DVD
- Digital cameras
- Smart devices

It is quite easy to locate the image resolution of your picture or digital asset with the use of Adobe Photoshop. Get familiar with its tools to be able to locate the exact measurements for your project.

- Open Adobe Photoshop and then open your picture.
- Locate the top bar and choose Image > Image Size.



- In this place, you will be able to find out the resolution in PPI.

When resizing photos, image editing apps like Adobe Photoshop are perfect. Photoshop allows for enlargements, but it is advised to keep them to a minimum because quality can be quickly lost. Enlargements might be used, for instance, when a document has to print in a larger size or an image needs to have a higher resolution (while maintaining document size).

In the set of instructions below, you will learn how to get your image enlarged in Photoshop;

- Ensure Photoshop is opened, locate File > Open, and choose an image. It is worth noting that when you are enlarging your images, you are expected to clean up dust and scratches or any form of noise prior to you starting to enlarge due to the fact that these items can also be magnified when you are enlarging the image.
- Locate Image > Image Size.
- The dialog box of an Image Size will then be shown.
- Insert the new pixel dimensions, document size, or resolution that you would like to make use of. Here you can choose to insert just any figure you want in sync with just how enlarged you would like to have your picture.

- Choose Resampling Method; before you tap the OK button, you can choose to go through the resampling method. In this option basically, Photoshop will have to build new pixel information so as to get the image enlarged. When you choose bicubic smaller, this means that you are instructing Photoshop to interpolate (or design new pixel information) which will give a much better result when you are enlarging the pictures. Bicubic (best used for smooth gradients): this is a quite precise method that helps with the calculation of the averages of surrounding pixels. Bicubic Smoother (best used for enlargements): this is based on Bicubic sampling and also works best when having to enlarge pictures that have high noise. Once done, the pictures will become smoother or softer with the use of this method.
- When all of the above has been completed, select OK. With this, you have been able to successfully alter the size of your picture!

In the same way that you enlarged your image using the techniques above, you can minimize the size of your picture in Photoshop. The technique of having the size of your image lowered in Photoshop is barely distinct from the procedure of enlarging explained above. You may need to lower the size of your image if the resolution is regarded as excessive for the web, the file size is too enormous to send as an email or only a small image is required as a printed piece.

- Ensure that Photoshop is opened, locate File > Open, and choose an Image.
- Locate Image > Image Size.
- The dialog box of an Image Size will then be displayed.
- Insert new pixel dimensions, document size, or resolution.
- Choose the Resampling method. In this place, Photoshop will discard any pixel that is unused so as to ensure that the image is reduced.

Bicubic is a very precise way that helps with the calculation of the averages of surrounding pixels. Bicubic Sharper is best used for reduction as it helps to ensure that the details of the images are still very sharp despite the reduction. Note also that if the image looks too sharp, it is best you make use of Bicubic.

- Choose OK to accept the changes.

Resolution for Printing

Working with digital files may also require you to take into account the ideal resolution for printing. The last thing you want is to spend hours creating an asset only to be let down when it prints out fuzzy and amateurish.

- Even while 72 PPI might make photographs look fantastic on a screen, for the best effects, you should print pictures at a minimum of 300 DPI. It's usually a good idea to ask a customer what their desired picture resolution is for the finished result while doing work for them, just to be safe.
- The type of paper you use can also have a huge interference on the quality of the final product because different papers absorb ink in different ways. Hence, ensure that you use the appropriate paper for the job, whether it's for a glossy magazine, a billboard, or a business document.

Top tips on changing Image Resolution

- **Find the right balance:** Take into consideration the specific size of the image, quality, and resolution are perfect for the needs of the project you are working on. Take time to meditate on any requirements for online usage, professional printing, and the amount of storage that may be needed to save your asset. It is also ideal that you double-check your configurations prior to printing or finishing your work.
- **Use the ruler tool:** In order to get a perfect idea of scale, rulers can aid in the consideration of the physical size while modifying the positioning images with Photoshop.
- **Capture pictures with a high-megapixel camera:** The larger the picture size in height and breadth, the more pixels will be needed to fill up the image. Since there is no way by which you can include existing pixels without you having to degrade the picture, you can commence by shooting with the use of a high-megapixel camera to get as much data as you can. This will also provide you with the best results possible for photo resolution.
- **Consider the size of the image:** Whenever an image becomes enlarged in resolution, it can become larger in size. This can also adversely affect data transmission speed when

you get to either upload or download images and it can also get to occupy more space on your computer or server.

- Utilize filters when sourcing for images online: locate by resolution when searching for digital assets online like stock images. This will make sure that you get to download pictures at their best and highest quality, ready to be used.

Activity

1. Change the size of a photo in Photoshop. Increase and reduce the size and ensure the picture quality is not affected.
2. Alter the size of a photo with the use of templates.

CHAPTER 3

HOW TO RESAMPLE AN IMAGE SIZE

When it comes to changing the scale of a picture in Photoshop, there are only two techniques that you may use. You have the option of either resizing or resampling the image. People frequently use both terms interchangeably, even though they do not. There is a substantial distinction between the two concepts. The Image Size dialog box, which can be located underneath the Image menu at the top of the screen, is entirely responsible for resizing or resampling your images as indicated above. The primary distinction between the need to resize and resampling is whether or not the image's pixel size is changed. If all you're doing is keeping the amount of pixels in the picture and altering the size at which the picture will be printed, or altering the size of the image's document size, you're resizing it. Resampling, on the other hand, occurs when you physically change the amount of pixels in an image.

Below are some basic terms that you need to know as regards resampling of images in Photoshop;

- Resampling means altering the amount of image data as you modify either the pixel dimensions or the resolution of the picture.
- Downsampling means reducing the number of pixels; when you downsample, information will be removed from the image.
- Upsampling means increasing the number of pixels; when you upsample, there will be an addition of new pixels to the picture.

Remember that resampling could lead to lower-quality images. For instance, an image loses some detail and clarity as you resize it to a greater pixel size. Refocusing the image details can be accomplished by using the Unsharp Mask filter on a resampled image. By scanning or generating the image at a high enough resolution, resampling is not necessary. Resize a copy of your file to see how changing the pixel size will look onscreen or to print proofs at various resolutions. In order to assign color values to any new pixels depending on the color values of existing pixels, Photoshop

resamples images employing an interpolation approach.

In the Image Size dialog box, you have a technique selection option some of which are explained below;

- **Nearest Neighbor:** this method is quite fast but not so precise in the replication of the pixels in a picture. You can use this method with illustrations that have edges that are not anti-aliased so that you get to keep hard edges and give a much smaller file. Nevertheless, this method can lead to a production of jagged effects, which can thereby become apparent when you choose to either scale or distort a picture or get to do various manipulations on a selection.
- **Bilinear:** this is a method that includes pixels by simply averaging the hue values of surrounding pixels. It gives off medium-quality results.
- **Bicubic:** this is a much slower but very precise method depending on the examination of the values of the pixels surrounding the image. With the use of more calculations that are quite more technical, Bicubic helps with the production of much smoother tonal gradations than both bilinear or nearest neighbors.
- **Bicubic Smoother:** this is a very good method for the enlargement of pictures depending on the Bicubic interpolation but created to give much smoother results.
- **Bicubic Sharper:** this is a very good method for bringing a reduction to the size of an image depending on the Bicubic interpolation with much-enhanced sharpening. This method keeps the detail in a picture that is resampled. If Bicubic Sharper gets to over sharpen certain areas of an image, you can attempt to make use of Bicubic.

It's important to note that you can choose the default interpolation technique Photoshop will employ when resampling image data. Select an approach from the Image Interpolation Methods menu by selecting

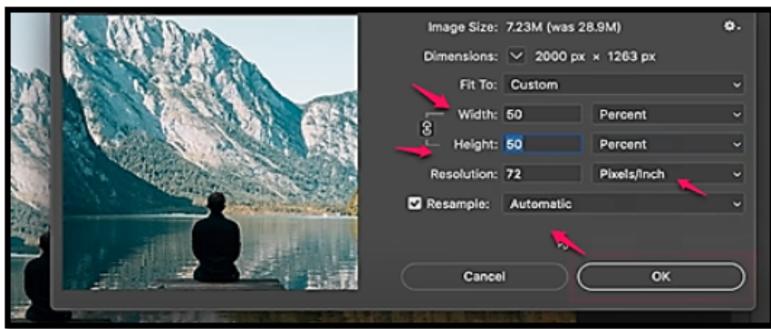
- Edit > Preferences > General (Windows) or Photoshop > Preferences > General (MacOS).

Making changes to the pixel dimensions of an

image

The printed dimensions or the image resolution of a picture are affected by changes to its pixel dimensions, as well as its image quality and on screen size.

- Select Image > Image Size.
- If you would like to keep the current ratio of pixel breadth to pixel height, choose Constrain Proportions. With the use of this option, you can instantly update the breadth as you also alter the height.
- Beneath Pixel Dimensions, insert values for Breadth and Height. To insert the values in the form of percentages of the dimensions in use, ensure that the unit of measurement chosen is Percent.



- The new size of the file for the image will then be displayed at the upper part of the Image Size dialog box, with the old file size in brackets.
- Ensure that Resample Image is chosen, and pick your preferred method of interpolation.
- If there are layers in your image and there are also styles applied to them, choose Scale Styles to help in the scaling of effects in the image whose size has been altered. This choice is available only when you choose Constrain Proportions.
- When you are done configuring options, choose OK.

Remember to downsample your image and use the Unsharp Mask effect when creating a smaller image for optimum results. Rescan the picture at a higher resolution to make it bigger.

Change the print dimensions and resolution

When creating an image for print media, it's useful to define image size in terms of printed dimensions and image resolution. These two parameters generally referred to as the document size; determine the overall amount of pixels thus determining the file size of the image. The base size at which an image is loaded into another application is also determined by the document size. The Print command allows you to further adjust the printed image's scale, but the modifications you make there only have an impact on the final product; they have no bearing on the image file's document size. You can change the total pixel count of the image, as well as the print dimensions and resolution, by resampling it. When you deactivate resampling, you can change either the size or the resolution; Photoshop transforms the other variable to keep the total number of pixels constant.

It is advised to first modify the dimensions and resolution without resampling for the best print quality. Then just resample when necessary.

- Select Image > Image Size.
- **Modify the print dimensions and image resolution or you can choose to modify both;**
 - If you would like to alter just the print dimensions or just the resolution and modify the Overall amount of pixels in the photo proportionately, choose Resample Image and then select a method of interpolation.
 - If you would like to alter the print dimensions and resolution without a need to change the overall amount of pixels in the picture, simply deselect Resample Image.
- If you prefer to keep the current ratio of picture width to its height, choose Constrain Proportions. With this option, you are able to automatically alter the breadth as the height also changes.
- Beneath Document Size, insert fresh values for the height and breadth. If you like, make a choice of a new unit of measurement. For the breadth, the column choices make use of the breadth and gutter sizes indicated in the Units and rulers preferences.
- For Resolution, insert a new value. If you like, make a choice

of a new unit of measurement.

If you want to go back to the default numbers shown in the Image Size dialog box, click reset while holding down Alt (Windows) or Option (MacOS).

How can a picture be resized in Photoshop without influencing its quality

Make use of pictures, photos, and other visuals to capture the interest of your target audience. As they say, "A picture is worth a thousand words." Since they can be quickly recognized by your potential customers, representations like images are crucial in our daily lives. People frequently use images to transmit information, learn new concepts, and gain a deeper grasp of subjects that interest them. Any business can benefit from using photos to describe their goods or services without having to rely exclusively on text. To attract your target audience, you should utilize high-quality visuals rather than amateurish photos and illustrations. The dimensions and pixel density that determine an image's quality are altered when you enlarge it. Resolution and dimension are closely related to one another.

An image's size will actually rise if the pixels per square inch (PPI) are decreased. The image's size on the screen will depend on its dimensions. An image can always be reduced in size without losing quality, but it can only be increased so far before the quality starts to drastically decline. In a digital image, the DPI (or PPI) and width x height parameters serve as a representation of the number of pixels. A 2000 by 2000 image at 72 DPI, for instance, contains a total of 4,000,000 pixels. You may just reduce the image's size to, say, 1000×1000 pixels, and it will still have the same degree of detail, but in a smaller image. Pixels would need to be manufactured in order to increase the size of the original image. As a result, by guessing which pixels should be utilized for the expansion based on the picture's data, the computer doubles the number of pixels to meet the new size, generating distortion and other effects. If you want to resize an image while maintaining its quality, all you've got to do is resample it. You can change the resolution and dimensions separately using resampling, and this will allow Adobe Photoshop to combine the pixels together in your

larger image to keep the image smooth.

- Choose the image and then click on Image Size. Check the box beside Enable Resample, and then check out the enlargement choices in the upper part of the drop-down menu close to it. You will notice that Adobe Photoshop is configured to Automatic, but due to the fact that you are attempting to ensure that the quality of the image is not lost, choose Preserve Details 2.0 under technology previews when you click on preferences.



- After selecting Preserve Details 2.0, you'll discover the Noise Reduction slider. After you've adjusted the dimensions to your liking, utilize the preview on the left-hand side of the screen to see how the image changes as you move the slider of the Noise Reduction.



Note that when you move the slider of the Noise Reduction too low,

it may allow the image to look as though it is grainy and pixelated, but when you move it too high it can also result in the picture being blurry. Make adjustments to the slider until you are able to locate a value that helps to bring a reduction to the noise without any reduction in the detail. Once you have been able to strike a perfect balance, choose OK and Save a copy of your resized image.

Changing the size of a picture with the use of the Transform tool

One of the most commonly used tools in Adobe Photoshop is the Transform tool. You can use this tool to perform numerous resizing, scaling, warping, and perspective adjustments in a single continuous action. When dragging a corner handle when editing any picture, the image is now scaled proportionally by standard, as shown by the Maintain Aspect Ratio option in the Options bar being set to ON.

To change the transform's default setting to non-proportional scaling, simply remove the Maintain Aspect Ratio button. When the Shift key is hit, the Maintain Aspect Ratio button is now toggled. When you hold down the Shift key while pressing the Maintain Aspect Ratio button, it switches it from ON to OFF and vice versa. Because Photoshop remembers your last transform behavior setting, proportional or non-proportional scaling will be the standard transform behavior the next time you run Photoshop.

- Choose the Picture you would like to alter its size with the use of the Transform tool.
- Pick Edit > Free Transform.



- To resize by dragging, do any of the following;

- Anytime the button of the Maintain Aspect Ratio is switched ON in the Options bar, move a corner handle to ensure the picture is scaled proportionally.
- If the Maintain Aspect Ratio button is OFF in the Options bar, move a corner handle to scale the picture in a non-proportional manner.
- Touch and hold down the Shift key while transforming in order to switch between proportional and non-proportional scaling behavior.
- If there is a need for you to scale numerically, insert percentages in the Width and Height text boxes in the Options bar. Choose the Link icon to ensure that the aspect ratio is kept intact.

It's important to keep in mind that each time you change a bitmap image (as opposed to a shape or path), the picture loses a little bit of sharpness. As a result, it's better to execute several commands prior to the addition of the cumulative transformation than to apply each transformation individually.

Resizing a picture using preset templates

Instead of starting with a blank canvas when creating a project in Photoshop, you can select from a large selection of templates from Adobe Stock. Templates provide resources and examples that you can use to finish your project. When a template is opened in Photoshop, it can be handled in the same way as any other

Photoshop document (.psd). In addition to using templates, you may also create documents in Photoshop by choosing from among the many presets or by making your own custom sizes. Also available for reuse are your own settings. Templates can provide inspiration and reusable pieces for your documents. Adobe Stock themes with high-quality images and illustrations are available directly within Photoshop. You may then easily build on these templates to create documents with the same parameters and design features. It is important to remember that templates can be accessed in Photoshop as psd files and typically feature numerous boards.

Blank document presets are preconfigured dimensions and specifications for blank documents. Presets facilitate the design of specific gadget form factors or the use of cases. For example, you can use a preset to quickly begin designing for the iPad Pro. Blank document presets also include established sizes, color modes, units, orientations, placement, and resolution choices. Using a preset, you can change these settings before creating a document.

Follow the steps below to resize images with the use of presets and templates;

- Choose the shape layer that you would like to position the picture in. This can sometimes be called a Photo Layer, Mask, or even Clipping Mask. Basically, it is simply the shape that you would like to have your image clipped into.
- Move to file then place embedded and make a choice of your photo from anywhere you must have saved it. The photo will now position itself into the collage, and get its own layer immediately at the upper part of the shape layer you have chosen to make use of.
- When the image is displayed in Photoshop, it will have handles active already which will give room for you to be able to resize it to the size you want. Make use of the move tool for moving the image at the top of the shape in the collage if need be.
- Once you notice that the image is looking the way you would like it to be, choose the checkmark on the upper menu bar.
- Once the above steps have been completed you can then proceed to clipping the picture to the shape layer beneath so that just that part of the picture is displayed. In Photoshop, you can get this done by making use of the keyboard shortcut;

CTRL + ALT + G (or CMD + ALT = G on a Mac).

As an alternative, navigate to Layer and the Create Clipping Mask which will get to do the same thing. Once this has been done, you will then see a small arrow positioned between the image you have just entered and the layer of the shape, displaying that they have been clipped together.

- Now that you can see what the image looks like inside the shape, you might wish to resize it again. You'll need to bring up those "handles" once more to accomplish this. Pressing CTRL + T (or CMD + T on a Mac) will allow you to achieve this Again, follow the Steps 3 and 4 directions.
- If you have more than one form for an image in your collage or storyboard, which is likely, simply repeat the steps above until all of your images are in position.
- Remember to save your project as a PSD so that all the layers are still visible, allowing you to change the entire collage later on if you'd prefer, and remember to save a JPEG version for printing.

How to use an Adobe Photoshop Gradient

Adding gradients is one important aspect of the main workflows that builds the fundamentals of digital image manipulation. Gradients help with the provision of the right information about the change in the intensity of color in your image in a certain direction.

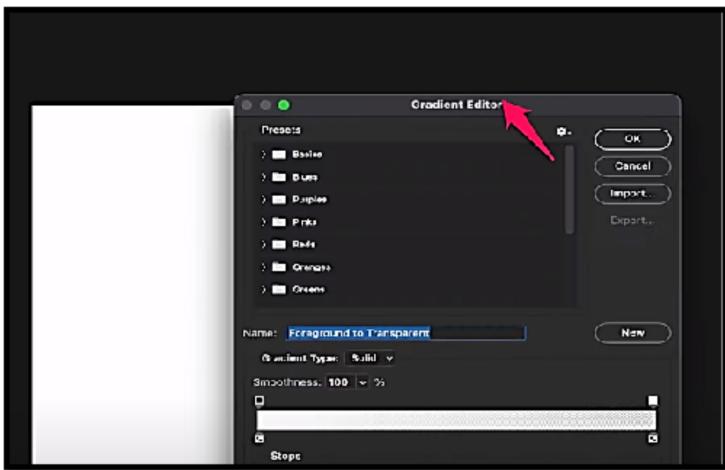
Apply a gradient fill

The Gradient Tool helps with the creation of a gradual blend between various colors. You can make your preferred choice from preset gradient fills or create your own. It is worth noting that you are unable to make use of the Gradient Tool with bitmap or color images that are indexed.

- If you would like to fill an aspect of the image, choose the preferred area. Else, the gradient fill is added to the whole entire.
- Choose the Gradient Tool, if you are unable to locate it, tap and press down the Paint Bucket tool.



- In the bar for various options, pick a fill from the wide sample of gradients;
 - Choose the triangle close to the sample to choose a preset gradient fill.
 - Choose inside the sample to see the Gradient Editor.



- Choose a preset gradient fill, or you can also make a choice of creating a new gradient fill.
- Make a choice to determine how the starting point and ending point will affect gradient appearance.
- **Linear Gradient:** this option shades from the starting point to the ending point in a round pattern.
- **Radial Gradient:** this choice shades in a counterclockwise

sweep around the starting point.

- **Angular Gradient:** this choice helps with shading in a counterclockwise sweep around the starting point.
- **Diamond Gradient:** this choice helps in mirroring the same linear gradient on either side of the starting point.
- **Get the following done in the options bar;**
 - Make an indication for a blending mode as well as the opacity for the paint.
 - If there is a need for you to reverse the order of colors in the gradient fill, choose reverse.
 - If there is a need to make a smoother blend with reduced banding, choose Dither.
 - If you would like to make use of a transparency mask from the gradient fill, choose Transparency.
 - To make a choice of a method for the gradient fill, make a choice from the method options; Perceptual, Linear, or Classic.
- Place the pointer in the picture where you would like to configure the starting point of the gradient and move to make a definition of the ending point. If there is a need for you to constrain the line angle to a multiple of 45 degrees, all you have to do is hold down the Shift key as you move.

Improved Gradients

The Gradients feature has been substantially improved, and the workflow has been accelerated, with the inclusion of new on-canvas commands and a live preview that developed automatically and can be updated non-destructively. You can now simply draw, preview, and modify stunning gradients using an improved Gradient Tool in the Photoshop desktop application. You can specify the color stops and alter your gradients directly on the canvas. You can also utilize this tool to change the color of the color stops and add extra color stops, and also the gradient's color, density, opacity, and blend mode. On the canvas, you can also see the gradients midway and spread.

The gradient feature is usually the default hence no action is needed unless you want to make use of a Classic gradient. When you choose a pixel layer, you can make a choice of the manner in which you would like to work, non-destructively (Gradient mode) or

destructively (Classic gradient mode). When having to work on a gradient fill layer, the tool will switch to the correct mode depending on the layer chosen, gradient fill, or mask.

To make use of the gradient feature, get any of the following done;

- Choose the canvas and move out the widget of the on-canvas gradient. While you are moving, you can choose to alter the angle and length of the gradient. When you let go of the move, you can return and alter the length and angle by choosing and moving once more.
- Alter the mid-points between color stops by choosing and moving the diamond-shaped icons.
- Remove the color stops from the on-canvas widget by selecting the color stop circles and dragging them beyond the gradient line. Tap twice on the color stops on the Gradient widget's on-canvas to change the color with the color picker.
- Make a choice of a gradient preset in the dropdown or in the Properties panel.

Add a Gradient to a Mask

Follow the steps below to garner more knowledge on the addition of a gradient to a mask;

- Choose a place in your image where you would like to include a gradient and with the use of the Gradient Tool, add a gradient to the mask.
- Move the mouse over the selection you have made and then add the gradient. Once done, you will be able to see the mask get updated in the gradient thumbnail in the panel of the Layers.
- Alter the gradient by choosing from the various types by moving the mouse in a repeated manner over the selection.

Add a Gradient to a smart filter (mask)

Follow the steps below to get to know how a gradient can be added to a smart filter;

- Include a filter to your smart object.
- Choose the Smart Filters thumbnail and then choose the Gradient Tool for the application of the gradient.

- Move the mouse across the canvas in order to add the gradient to the smart filter. Pause for some minutes so that you can observe the thumbnail as it gets updated.
- Make a choice from the diverse Photoshop filters and drag the widget across the canvas in order to obtain cool effects. You can also choose to make other alterations which also include making changes to the midpoint.

Apply gradients to layers

If you would like to apply a gradient to text layers as a layered effect, do any of the following;

- Choose one or more text layers in the panel of Layers and then choose any gradient on the panel of Gradients to add it.



- Move a gradient from the panel of Gradients onto the text content on the canvas portion.
- Move a gradient from the panel of the Gradients onto a layer in the panel of Layers.

To apply a gradient to a shape layer as shape fill, do any of the following;

- Choose one or more text layers in the panel of Layers and then choose any gradient in the panel containing Gradients to add it.
- Move a gradient from the panel containing Gradients onto the text content on the canvas portion.

If you would like to apply a gradient to pixel layers, do any of the following;

- Move a gradient from the Gradients panel onto a pixel layer in the panel containing layers.
- Photoshop will then instantly build a fill layer at the top of the pixel layer.

How to Set Up and Align Thumbnails in Adobe Photoshop on a Page

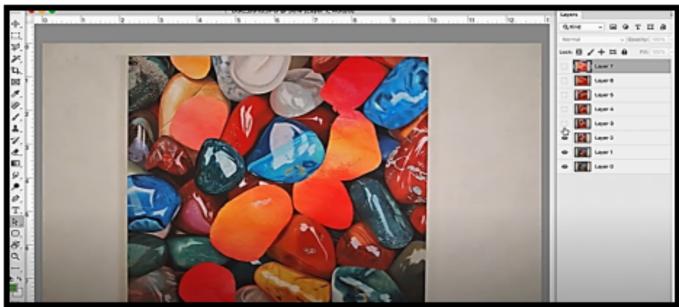
As opposed to the original photographs, thumbnails are scaled-down copies of larger images. Initially, the phrase was used to refer to actual, very small-scale drawings or representations. It has become customary since the 1980s to use thumbnails specifically for previewing digital photos. They frequently include a link to the source image because these thumbnails act as preview images. Thumbnails that are clicked reveal the image's larger size. Google's image search uses thumbnails to quickly load a number of images on a single page. This provides users of search engines with a summary of the search results. When a thumbnail is clicked, a larger version of the image, along with alternatives and a link to the source page, is shown. Thumbnails are used on company websites to build online galleries, such as those with a summary of the product portfolio, references, or application samples. Thumbnails are used by photographers and artists to provide viewers with a quick summary of their work.

Thumbnails are often utilized in online retailers. On category pages, for example, they provide an idea of what is available in each category. Thumbnails are widely used on product websites to demonstrate goods from multiple perspectives. A thumbnail is frequently displayed as a reminder next to each purchase and included in the shopping basket item. Photoshop provides you with tools that can be used to align and distribute layers. In this example, thumbnail images will be positioned in a base image, and then you get to align and distribute them down the right side.

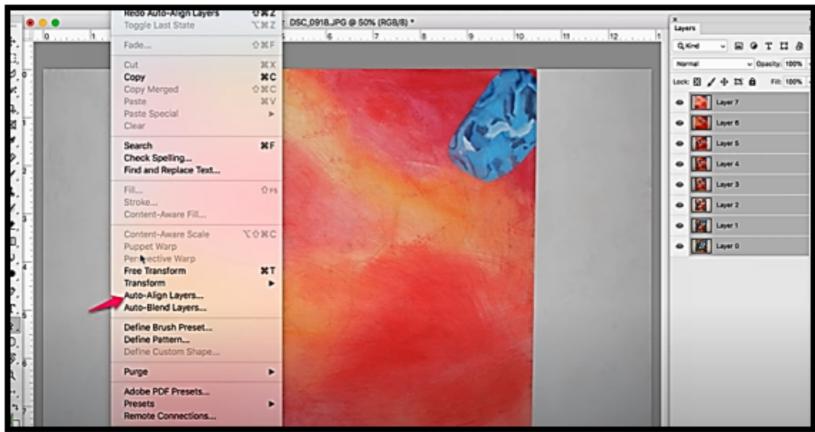
- To get the thumbnail images into Photoshop, locate File > Place.
- Choose the pictures to be used and choose OK. To finalize the place command, you will have a reason to tap Enter for each image you are adding. These images will be displayed at the top of each other in the image windows and added in the

form of layers in the panel containing Layers.

- When you are in the panel containing Layers, choose the layer that has the image thumbnail to show in the top-most place



- Then move the picture to the preferred location in the image window.
- Choose the layer with the image thumbnail to show in the bottom-most place and move it to the preferred location.
- In the panel containing Layers, choose all the thumbnail layers by making a click at the one at the top then holding down the Shift key and choosing the one at the bottom so they become highlighted or you can also click on Auto Align Layers under Edit.



- When more than one layer is chosen, you will see the Align and Distribute buttons in the Options Bar. Choose Align Right Edges, and then Distribute Vertical Centers.

- With the above settings completed, the thumbnails are now aligned and well-spaced.

How to make the most of variable fonts in Adobe Photoshop

Variable fonts are a versatile typeface. The Adobe Fonts variable typeface panel allows you to customize the appearance of variable fonts and choose the best style for your projects. Photoshop, InDesign, and Illustrator in the Creative Cloud now support changing typefaces.

Variable fonts, as opposed to static fonts, use a single file to store many font styles. They allow you to adjust a value for every single axis of a typeface, giving you control over the way it looks that static fonts cannot. For use in your project, each individual style of a traditional static font must be added or installed. You could add Acumin Pro Regular, Acumin Pro Italic, and any other styles you want access to, for instance. You would only need to add one typeface because the Acumin Variable already includes all of the Acumin styles. An instance of a variable typeface is any configuration of that font. For ease of access, instances are pre-made styles. The variable font panel usually demonstrates that the Acumin Variable is set to a default instance, which is the default option that all variable fonts use before being customized.

The axis controls are located further down the display. A continuous variety of stylistic variants are represented by axes. You can locate multiple axes in a single variable font. An axis can be adjusted to any value between its lowest and maximum values. Slant, Weight, and Width are the axes in the example of the Acumin Variable. Each family description webpage for a changeable font on the Adobe Fonts website has an engaging text tool and panel that allows you to adjust the font's appearance to meet your preferred style. Choose any of the pre-made situations or create your own to quickly manipulate.

Add a variable font to a web project

In order to store a variable font for use in your web project, select

- Add to web project at the top of the panel of the variable

font on the family page. Be sure that you choose the right, certain variable fonts have more fonts within their family.

To copy the CSS code for the custom instance you created, select Copy CSS in the panel's lower section. If there are no specific configurations, the code will display a default instance. After customizing a variable font, you have the option of bookmarking the browser's URL to return to the most recent custom configurations or selecting Copy URL to share or store the setting you used.

Variable fonts in use

Variable typefaces are ideal for a range of uses since they can be customized, including digital graphics, product packaging, and even vehicle wrapping. A typeface can be set up such that it is still visible on uneven surfaces by altering the width. Long titles, which frequently don't fit in lower-third images, can be accommodated by using inventive changeable font choices to highlight a brand's personality. On billboards and advertisements, you can use variable fonts to establish a visual hierarchy. You can also use variable fonts in packaging design to fit into small places and peculiar forms. Better line-breaking in paragraph justification is made possible by variable typefaces. Particularly the width axis enables more effective and aesthetically pleasant word spacing.

They function well in adaptive web design because they support changeable fonts. One variable font can be used to vary from small to large screen sizes, keeping the file size to a minimum and accelerating download. You can modify your CSS to include code snippets that cause changeable fonts to animate, and react to music, ambient light, or computer system themes. Variable fonts are also simpler to animate when using variable font axes. The use of this font technology for interaction and innovation by type designers is still being explored.

What is Monitor Calibration?

Calibration of a monitor or display involves bringing the colors on your screen into compliance with the RGB (red, green, and blue) color standards. The majority of TVs and computers use this model, which was developed in the nineteenth century. Since almost all screens use the RGB model, correcting color on a correctly

calibrated screen will increase the likelihood that your work will seem as you intended it to on other people's screens. In order to achieve a neutral white with no color shift, calibration of your monitor is necessary. It's also crucial that other colors match the lighting conditions you're working in as closely as possible.

Without realizing it, you might induce a green shift on pricey mobile devices that are color-controlled by the gadget's supplier by utilizing an uncalibrated display to color-correct a magenta shift in the sky. Your white and black spots will also be established during calibration. Depending on how the settings are set up, what you see as spotless white on your own display may only look light gray on someone else's screen or mobile device.

Where to begin your Color Calibration?

You cannot achieve accurate color with either online calibration software or the built-in Windows or Mac operating system calibration tools. Because eyes are subjective, these systems rely on your vision. A colorimeter is required to obtain a color that is absolutely consistent. The display color can be adjusted for your particular screen and the lighting in your room using a colorimeter, a small calibration tool that you can connect to your screen and utilize with calibration software. The Datacolor Spyder and X-Rite ColorMunki, for example, will measure the ambient light where you are and recommend the optimal calibration settings. Give your monitor roughly 30 minutes to warm up before starting the operation. Avoid shining direct light on your monitor, and ensure that the surrounding lighting is comparable to how it will be when you modify the colors in your work.

The very first you will be asked to do by your software is to indicate your monitor type and the target settings:

White point

Pure white light is not a real phenomenon. A white that is heated more intensely will have a bluish hue, just like the bluest area of a candle's flame. Redder, orange, or yellower hues can be seen in cooler whites. The white point on modern monitors is the temperature setting (measured in degrees Kelvin) that determines how warm or cool your whites will seem. When working with video on an LCD monitor it is advised to use the 6500K or D65 white

point. This is commonly referred to as the native temperature of your monitor. When interacting with still images that you intend to print, the 5000K (D50) white point is suggested because it seems whiter on paper.

Gamma settings

Gamma is the measure of how quickly colors transition from black to white. The black-and-white extremities are the same for both gammas, despite a higher gamma value offering more contrast within that range. Depending on how you anticipate your video will be viewed, a certain gamma level may be advised. The suggested display setting for a screen in a bright space, like an office, is 2.2. The default configuration for Mac and Windows computers is this. The suggested setting for displays in dim environments, such as home theaters, is 2.4 since contrast is easier to see in a dim environment.

Luminance

The brightness or luminous intensity of the display is referred to as luminance. When performing color correction, it's crucial to maintain consistency with this option to avoid correcting one scene at one brightness level and another at a completely different one. A typical LCD screen should have a brightness of 120. The automatic calibration procedure will start as soon as you've verified your monitor's settings. The colorimeter will compare the colors on your monitor to industry standards, map the differences, and produce a special color profile (also known as an ICC profile) just for your display. You can identify the precise color tones and convey them across devices if your profile is accurate.

How often should you calibrate?

To guarantee your colors remain consistent, professional colorists advise you to calibrate screens at least once a month, especially as your monitor ages and its hues fluctuate. Others contend that color on all gadgets is now essentially excellent enough because technology has gotten to that point. You can test your films on a few different devices to make sure nothing is noticeably off if precise color isn't your primary focus. You can always play it safe by avoiding significant color modifications if color fidelity isn't your top priority. "If you keep everything fairly even and stick within the

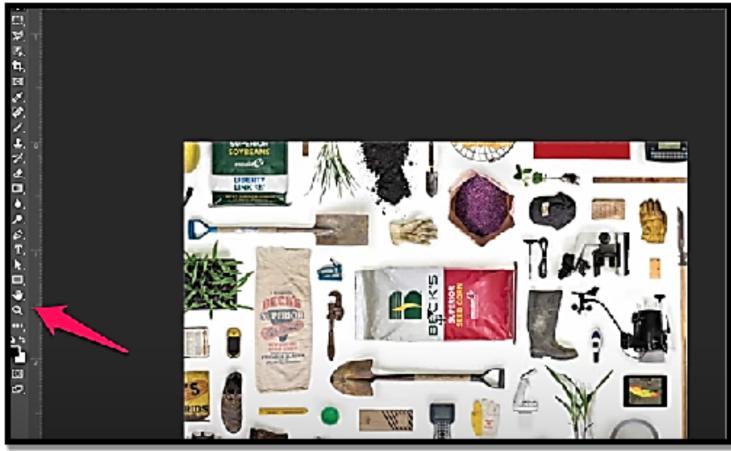
general scope, it will typically translate well across various devices. When you push things, issues arise. On a different device, it can be excessive to oversaturate the colors, provide too much contrast, or crush the blacks. There is no replacement for high-quality raw footage, whether you calibrate your monitor using a colorimeter or the tools provided by your system, or you just compare color on other devices. Make a shot list before you start shooting, and spend time and effort lighting each photo appropriately. Afterward, you'll have dynamic photographs you may tweak to meet your artistic vision once you're in the editing room.

Zooming in Photoshop

You'll probably use the Zoom tool more than any other available tool, whether you're editing a photo or making a poster. The Zoom tool is your greatest buddy when you want to raise the magnification on a specific area of the image you're working on to ensure every pixel appears perfect or lower it to see the entire image. There are various zoom options. For various uses and workflows, Photoshop provides a variety of zoom settings, along with keyboard shortcuts for rapid access to each one.

Zoom tool

The Zoom tool can be accessed by clicking the magnifying glass in the toolbar; after that, click the precise location you want to zoom in on. You may also just click and drag your pointer to the right to zoom in or to the left to zoom out while pressing and holding the Z key.



Zoom with Scroll Wheel

Using the scroll wheel on your mouse to go closer to and farther from the image, respectively, is another quick and easy way to zoom in and out.

- Toggle the Zoom with Scroll Wheel option to the on position in the Preferences panel by pressing Ctrl + K (Command + K on a Mac). As an alternative, you can scroll the mouse wheel up or down while holding down the Alt key (or the Option key on a Mac).

Resize windows to fit

You can drag and resize windows using this option to meet your needs. Set UI Scaling to 100% in Edit Preferences Interface, and then restart Photoshop to have the change take effect. Alternately, use Alt + F7 to resize and Alt + F8 to move a window.

Zoom All Windows

Choose the Zoom tool, and then choose Zoom All Windows in the Options bar at the upper part of your Window to ensure that the zoom function is applied to all the images that are opened.

Animated and Scrubby Zoom

These keystroke-free zoom techniques are ideal for getting close to your image.

- Press Z to pick the Zoom tool, then click and hold on the area of the image you wish to zoom in on to activate Animated Zoom. As long as you continue to press down, the image will zoom. For further information, go to Photoshop Preferences Tools.
- Choose the Zoom tool for Scrubby Zoom, then click and drag to the right to zoom in and the left to zoom out. (When the Zoom tool is selected, enable Scrubby Zoom by ticking the box in the Options bar at the top of your project window.)

Fit Screen

- Press Command + O on a Mac or Ctrl + O on a Windows keyboard to quickly resize an image to fit your screen. You may also select View Fit on Screen.

Using the Zoom tool

You can zoom in or out of an image by using the Zoom tool or the resulting menu choices. Each time you use the Zoom tool, the image is enlarged or reduced to the close preset fraction, and the display is then centered on the place you clicked. The magnifying glass will appear empty until the image has been magnified by 320% or shrunk down to just 1 pixel, whichever comes first. It is important to note that the display photos section below can help you view images that are the sharpest, most accurately displaying layer effects, and other alterations.

Display images at 100%

Since one monitor pixel displays each image pixel, a zoom setting of 100% offers the most accurate view. (At various zoom levels, monitor pixels are interpolated to a different number.)

- Get any of the following done;
 - Click twice on the Zoom tool in the toolbox.
 - (Creative Cloud) Select View > 100% or, select 100% in either the Zoom tool or the Hand tool options bar.
 - Select View > Actual Pixels or, choose Actual Pixels in either the Zoom tool or Hand tool options bar.
 - Insert 100% in the Status Bar and touch Enter (Windows) or Return (MAC OS).

Configure Zoom tool preferences

- Select Edit > Preferences > Performance (Windows) or Photoshop > Preferences > Performance (Mac OS). In the GPU configurations section, choose Enable OpenGL Drawing.
- In the General preferences, choose any of the following; Animated Zoom allows for continuous zooming while pressing down the Zoom tool.
 - Zoom with Scroll Wheel allows zooming with the use of the scroll wheel on your mouse.
 - Zoom Clicked Point to Center this centers the view of the zoom on the location chosen.
 - Zoom continuously

If you would like to make use of this option, ensure that your video card offers support for OpenGL, and Animated Zoom also must be chosen in General preferences.

- Choose the Zoom tool, and then get any of the following done;
 - Select and hold in the image to zoom in. Tap Alt (Windows) or Option (Mac OS) to zoom out.
 - In the options bar, choose Scrubby Zoom. Once done,. Move to the left in the image to zoom out, or to the right to zoom in.

Magnify a certain area

- Choose the Zoom tool.
- Move over the part of the image that you would like to enlarge.

The Zoom marquee's interior space is visible at its greatest magnification. Drag a marquee in Photoshop while holding down the spacebar to move it around the artwork.

Temporarily zoom an image

- Press down the H key, and then select the image and press down the mouse button. The current tool in use will then change to the Hand tool, and the image magnification will change as follows;
 - If the whole image initially fits within the document

window, the image will then zoom in so it fits the window.

- If only a part of the image was initially seen, the image will then zoom out. Move the zoom marquee to enlarge a distinct aspect of the picture.
- Let go of the mouse button and then the H key. The image will then go back to the former magnification and tool.

Instantly resize the window when zooming

- Select Resize Windows to fit in the settings bar when the Zoom tool is active. When you enlarge or minimize the image's view, the window resizes accordingly.

The window stays the same size regardless of the image magnification when Resize Windows to Fit is deselected (the default). When working with tiled views or smaller monitors, this can be useful. If there is a need for you to automatically modify the size of the window when making use of keyboard shortcuts for zooming, click on Edit > Preferences > General (Windows) or Photoshop > Preferences > General (Mac OS). Then choose the Zoom Resizes Window choice.

Fit an image to the screen

- Do one of the following:
 - Click twice on the Hand tool in the toolbox.
 - Click on View > Fit On Screen.
 - Choose a zoom tool or the Hand tool, and choose the Fit On Screen button in the options bar. When chosen, these options will then scale both the zoom level and the window size such that it fits the screen space available.

How to use Scrubby Zoom

- With the Zoom toll still chosen, on the Options bar that can be found at the upper part of the screen, select the “click and move either left or right to zoom” button.
- Click and move to the left, the magnification level will then be reduced.
- Select and move to the right, the magnification level will then be increased.

How to use the Photoshop Hand tool

The majority of Photoshop's tools let you do fun things like adjusting colors, enhancing contrast, and other things. The Hand tool does not alter your image in any way, but it does improve visibility. When you enlarge your image, it is most useful. When you're attempting to perform precise tasks, such as choosing a selection, zooming in makes it easier for you to see. Unfortunately, because your workspace can't fit the entire image, zooming in also removes portions of your image. Now all you have to do is move your cursor in the desired direction. Photoshop will detect that you appear to want to view a new area of the picture, and you'll see the picture start to move.

Like some of your other tools in Photoshop, the Hand tool can be found on the toolbar on the left. You will see it down close to the bottom. You can also choose to tap the H key on the keyboard to get the hand tool activated. Nevertheless, there will rarely ever be a need for you to access the toll this way. To ensure that things are much easier, you can pause any tool you are making use of and activate the Hand tool at just about any time with the use of the space bar. For instance, nothing would happen if you tapped the H key while making a selection using the Magnetic Lasso tool. Photoshop won't move to a different tool since you are still working with the Magnetic Lasso tool and haven't finished making your selection. However, Photoshop pauses the Magnetic Lasso and launches the Hand tool if you continue to press the Spacebar. You can swiftly click and drag your image to a different location, then let go of the Space bar and use the Magnetic Lasso as if nothing had ever interrupted you. It's really simple to use the Hand tool. Once you notice that your cursor has changed into a small hand, click and move your picture in the desired direction. Once the image is in position, let go of the mouse. A handful of the buttons in the Options bar are also useful to be aware of. When you have several open documents in the workspace and wish to scroll them all at once, check the Scroll All Windows box.

The 100% button will instantly 100% zoom your image. The Hand tool is frequently used in conjunction with the Zoom tool. Keep in mind that you can zoom in and out more quickly by using the Zoom shortcuts. To zoom in or out, press the keys Ctrl + + or Command

+ +, respectively. The image will hop to fit inside your workspace when you click the Fit Screen button, allowing you to see the entire thing at once. Your image fills the workspace when you click the Fill Screen button. If your image doesn't have the exact same aspect ratio as your workspace, this will typically trim a little off the top and bottom or the sides.

Panning and Zooming with the Navigator panel

The ability to zoom in, out, and pan in Photoshop is one of the pleasures of working on images, graphics, or illustrations. We can increase or minimize our view with the Zoom Tool. The keyboard shortcut Ctrl + (plus symbol) for Windows or Cmd + (plus symbol) for Mac is the easiest way to zoom in on an image. Press Ctrl- (minus sign) or Cmd- (minus symbol) to zoom out. With the use of the navigation panel, you are able to alter the way you view your picture with the use of the display of a thumbnail.

The red box in the Navigator shows the part of the window that can be seen at the moment.

- Move the slider on the Navigation panel to the left and right so you get to have a view of how it affects the way you see the image.
- Move the slider all the way to the right so that the image will then be enlarged to 3200%.
- Place your cursor over the red rectangle in the Navigator panel and take note if there is a change to the hand icon. With the use of the hand icon, move the rectangle around in a panning pattern.

As you must have noticed, the Navigator panel seems more like a combination of the Zoom tool and Hand tool functionality.

Activity

1. How can a picture be resized?
2. With the use of the Transform tool, change the size of a picture.
3. How can you configure and align thumbnails?
4. What are variable fonts and how can they be used in Photoshop?
5. What is the use of the zoom tool and hand tool?

6. Pan and zoom your picture with the use of the navigation panel.

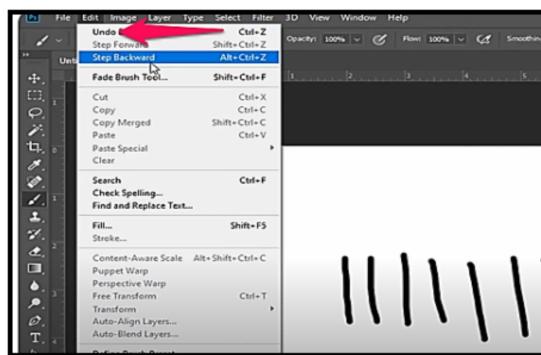
CHAPTER 4

HOW TO UNDO A COMMAND

Commands are a set of instructions that when issued help Photoshop perform some actions. There are various commands available for use in Photoshop, for instance, when you tap Ctrl + J, this command helps to create a new layer via copy, and when you tap the H key as discussed in the previous chapter above, the Hand tool will be introduced. Oftentimes, there have been cases when a command was wrongly issued or there was a need to revert the command swiftly as it was not the right step to take at that point in time. In this section, you will learn about the various methods by which you can get to undo a command as fast as possible. Multiple steps can be undone in your Photoshop document with the use of the Control + Z (Win) / Command + Z (Mac). This fresh multiple undo mode is enabled custom wise.

To get to undo certain commands in Photoshop, follow the set of instructions below;

Undo: this helps you to move just one step back in the undo chain. This means that you are able to change the last command you have just initiated. Click on Edit > Undo or make use of the keyboard short Control + Z (Win) / Command + Z (Mac).



Notably, the Edit menu also facilitates the display of the name of the step that will be reversed adjacent to the Undo instructions. There are also other ways by which a command that has been issued long before but in the same document can still be undone. In the sections below, you will get to learn how to do all of this easily.

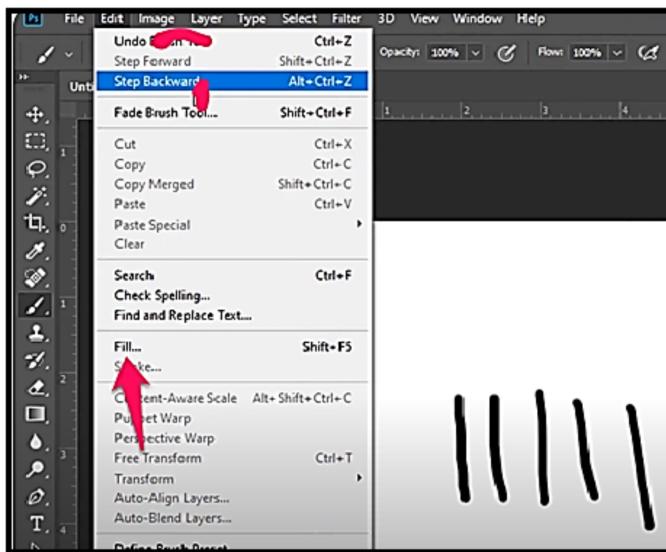
Revert to the last saved version

- Select File > Revert. Take into consideration the fact that Revert is included as a history state in the History panel and it can be undone.

Restore part of an image to its previously saved version

Do any of the following:

- Make use of the History Brush tool for painting with the chosen state or snapshot on the History panel.
- Make use of the Eraser tool with the Erase to History choice chosen.
- Choose the area you would like to bring back, click on Edit > Fill.



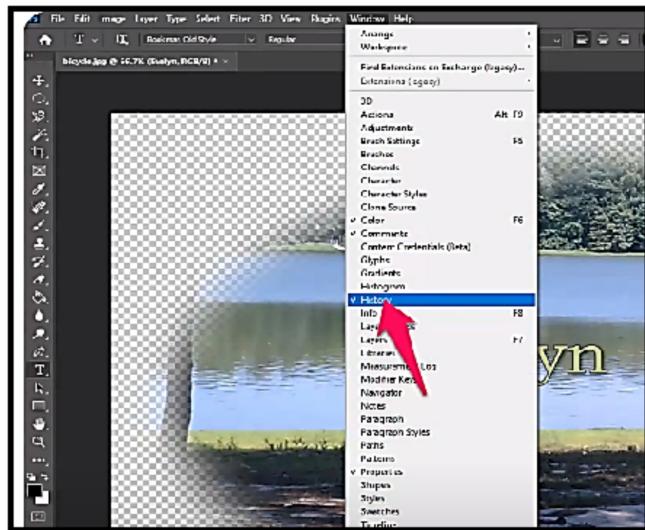
To make use of it, choose History, and select the OK button. It is worth noting that if you would like to bring back the image that has

a snapshot of the original state of the document, click

- History Options from the panel menu and ensure that the Automatically Create First Snapshot choice is chosen.

Making use of the History Panel

Use the History panel to examine any recent state of the picture created during the present working session. Every time you make an alteration to an image, the updated status is displayed in the panel. Each of the stages is listed separately in the panel, for instance, if you pick, paint, and rotate a portion of an image. The image returns to its previous condition when you choose one of the states, which was when the alteration was first made. Following that, you can start working. In Photoshop, you can make a document from a state or snapshot by using the History panel to erase picture states. If you would like to show the History Panel, click on Window > History, or choose the History panel tab.



Ensure you take the following into consideration when you are making use of the History panel;

- Program-wide alterations, like modifications to panels, configurations of color, actions, and preferences, are not shown in the History panel due to the fact that they are not alterations to a certain image.

- By default, the History panel makes a list of the former 20 states. You can choose to alter the number of the states remembered by configuring a preference beneath Preferences > Performance. Much older states are instantly deleted to give more room for memory for Photoshop. To maintain a certain state all through your work session, ensure you have a snapshot of the state.
- Once a document is closed and reopened, all the states and snapshots from the previous working session will be deleted from the panel.
- States are included in the lowest part of the list. This means that the oldest state is at the upper part of the list, and the most recent one is at the lowest part of the list.
- Each state is listed with the name of the tool or command utilized in the changing of the image.
- By default, the states below the one you've chosen are darkened. This makes it simple to determine which modifications will be overwritten if you stick with the current state.
- By default, choosing a state and altering the image removes all states that come after it.
- You can employ the Undo command to undo the most recent modification and restore the eliminated states if you choose a state and then modify the picture, removing the states that followed.
- By default, when you delete a state it will delete that very state and all the states that must have come after it. If you make a choice of the Allow Non-Linear History choice, deleting a state will delete just that state alone.

History Options

You can choose to indicate the maximum number of items you would like to add to the History panel and configure other options to get the panel well customized.

- Choose History Options from the History panel menu.
- Choose your preferred option;

Automatically Create First Snapshot Instantly builds a snapshot of the original state of the picture when the document is opened.
Automatically Create New Snapshots When Saving this choice

develops a snapshot each time you save. Allow Non-Linear History to alter a selected state while leaving the following states intact. When you choose a state and alter the image, all states that follow the one you choose are often removed. This enables the History panel to provide a list of the editing operations in the chronological sequence in which they were performed. You can pick a state, alter the image, and then delete exactly that state by encoding states in a nonlinear manner. The modification is added at the conclusion of the list. Show New Snapshot Dialog by Default this compels Photoshop to prompt you for the names of snapshots even when you make use of the buttons that are on the panel. Make Layer Visibility Changes Undoable By default, this selection is made. Layer visibility switching between on and off is noted as a history step. To exclude changes to layer visibility from history steps, deselect this option.

Edit History Log options

For your own records, the records of your clients, or for legal reasons, you might need to keep meticulous records of the changes made to a Photoshop file. You can preserve a text record of all the modifications you've made to an image by using the Edit History Log. Using Adobe Bridge or the File Info dialog box, you may access the metadata for the Edit History Log. You have the option of storing the text in the metadata of changed files or exporting it to an external log file. Larger files may take longer to open and save when editing operations are stored in the file metadata. By default, the history log data that has to do with each session is kept as metadata included in the image file. You can choose to indicate the area where the history log data is kept and the level of detail that is in the history log.

- Pick Edit > Preferences > General (Windows) or Photoshop > Preferences > General (Mac OS).
- Choose the History Log preference to switch from on to off.
- **For the Save Log Items To option, make your preferred choice from the options below;**
 - **Metadata:** keeps the history log as metadata included in each of the files.
 - Text File exports the history log to a text file. You will then be prompted to give the text file a name and also

make a choice of your preferred storage location.

- Both keep metadata in the file and build a text file.

- From the Edit Log Items menu, make a choice of one of the following options;

- Sessions alone saves a record of all the time you commence or leave Photoshop and each time you launch and close files (each filename of the picture is added). This choice does not add any information about alterations made to the file. Concise this adds the text that shows in the History panel in addition to the information of the session. Detailed this adds the test that is shown in the Actions panel and also the concise information. If there is a need for you to have a complete history of all the alterations made to the files, it is best you choose this option.

How to make a picture straight and how to crop it

Cropping is the removal of some elements from a photo in order to sharpen the focus or improve the composition. In Photoshop, crop and align images with the Crop tool. The crop tool is non-destructive, and you have the option to keep the pixels you've cropped in order to refine the crop limits in the future. While cropping, the Crop tool offers simple ways to straighten a picture. Visual aids offer an interactive preview of all operations. Real-time feedback assists you in visualizing the finished product when cropping or straightening photos.

Crop a photo

- Navigate to the toolbar, choose the Crop Tool. Crop the borders shown on the various edges of the picture.



- Make a drawing of a fresh cropping area or move the corner and edge handles to indicate the boundaries of the crop in your picture.
- **Indicate the Crop choices with the use of the Control bar.**
 - Size and proportions make a choice of a ratio or size for the crop box. You can also make a choice of a preset, insert your own, or even insert your own preferred preset values for use in the future.
 - Overlay Options make a choice of a view to show overlay guides when cropping is ongoing. Guides like Rule of Thirds, Grid, and Golden Ratio are available. To move around all the various options available, touch O.
 - Crop Options Choose the Settings menu in order to indicate more crop choices.
 - Auto Center Preview allows this choice to position the preview in the middle of the canvas.
 - Show Cropped Area allows this choice to show the area that has been cropped. If this choice is disabled, just the final aspect will be previewed.
 - Enable Crop Shield makes use of the crop shield to overlay the areas you have cropped with the use of a tint. You can choose to indicate a color and opacity. If you allow Auto Adjust Opacity, the opacity will be reduced when you modify the crop boundaries.
 - Delete cropped pixels To apply a non-destructive crop and keep pixels outside the crop limits, disable this option. No pixels are lost during non-destructive cropping. To view areas outside the current crop borders, click the image afterward.
 - To eliminate any pixels that are outside the crop region, turn on this setting. These pixels are lost and cannot be

recovered for alterations in the future.

Straighten a photo while cropping

You can get a picture straightened while you are cropping it. The picture will be rotated and aligned to help straighten it. The canvas will instantly be resized to accommodate the rotated pixels.

Do any of the following to get a picture straightened;

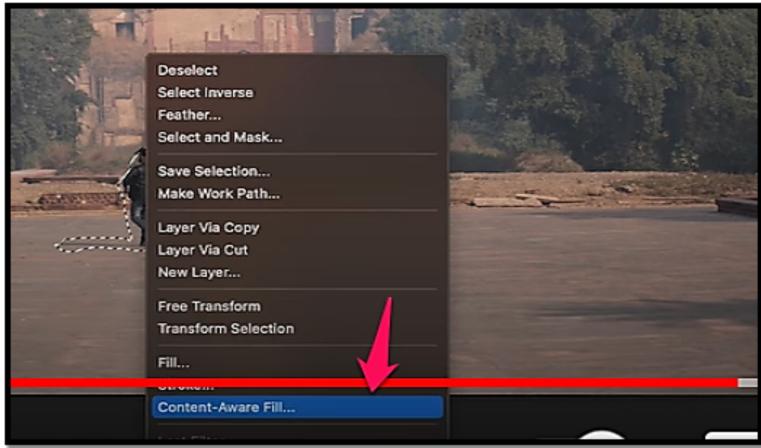
- Position the pointer a little on the outside of the corner handles and move to rotate the picture. A grid will show inside the crop box and the picture will then rotate at its back.
- Choose Straighten in the control bar and then make use of the Straighten tool, make a drawing of a reference line to straighten the picture. For instance, make a drawing of a line along the horizon or an edge in order to ensure that the image is straightened along it.

Content-Aware Fill on Crop

Photoshop now makes use of content-aware technology to fill the gaps in an intelligent manner when you make use of the Crop tool for the straightening of an image, rotating of an image, or expanding your canvas over the original size of the image.

Follow the steps below to make use of this tool;

- Navigate to the toolbar, and choose the Crop Tool. Crop the borders showing on the edges of the picture.
- In the bar for options, choose Content-Aware. The default rectangle will be enlarged to harbor the complete image.



- With the use of the handles around the picture, straighten or rotate the picture. As an alternative, you can choose to expand the canvas over the initial size of the picture.
- When you are done with the results, choose the tick symbol in the Options bar to commit the crop operation. Photoshop will intelligently fill in the white/gap portions of the picture.

Be aware that the Crop tool's Classic mode does not support Content-Aware Fill On Crop. Do the following if you want to turn off the Classic mode:

- Ensure that the Crop tool has been chosen; choose the Set Additional Crop Options icon in the toolbar.
- In the settings menu that displays, deselect Use Classic Mode.

Transform perspective while cropping

Utilizing the viewpoint crop tool, you may crop a picture while altering the viewpoint. Employ the perspective crop tool when editing photographs that have keystone distortion. Keystone distortion occurs when an item is photographed from an angle rather than straight on. For instance, if you photograph a tall building from the ground up, the building's edges appear to be closer to one another at the top than they are at the bottom.

- To make certain corrections to the image perspective, press and hold on to the Crop tool and choose the Perspective Crop tool.
- Draw a marquee around the distorted object. Match the

edges of the marquee to the rectangular edges of the object.

- Tap Enter (Windows) or Return (Mac OS) to finalize the perspective crop.

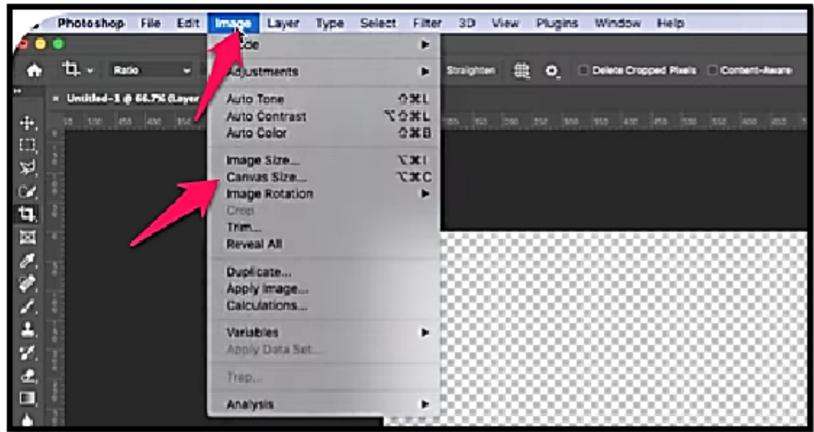
How to adjust the canvas size

Photoshop may make canvas size and image size sound and appear identical, but they are two very different concepts. The canvas size and picture size selections affect separate areas of your project, even though both have an impact on the overall size of the file you are working with. It's simple to mix up the two since they are both listed in the same menu. Your workspace is referred to as a canvas in the world of Adobe. This phrase just refers to the usable area in the application, not the actual image you opened in Photoshop. The artboard and canvas sizes resemble one other somewhat (more so than the canvas and image sizes). These two, nevertheless, are not quite the same. An empty canvas that may be filled with pictures, objects, text, and additional elements is an artboard in Photoshop. The project can have as many layers and layer groups as the artboard will allow. In Photoshop, you may include numerous artboards in a single open project. The dimensions of an artboard and a canvas are equivalent in that only your workable area is altered—nothing else is. When you change the artboard or canvas size, all of the pictures and material you have in the workspace area will retain their previous dimensions. Canvases only have one page, whereas artboards have numerous pages.

In the sections below, you will learn how to modify the size of the canvas;

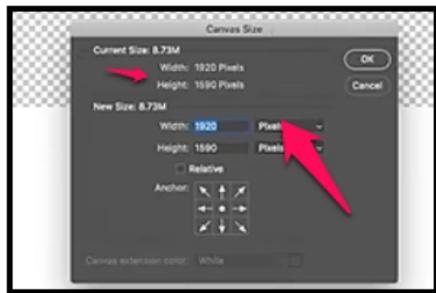
You can modify the canvas size of a picture with the Canvas Size command. An existing image has more room around it when the canvas is larger. Cropping occurs when the canvas size of an image is reduced. The additional canvas in an image with a transparent background is transparent if the image's canvas size is increased. If the image's backdrop isn't transparent, there are a few ways to choose the color of the new canvas.

- Pick the Image > Canvas Size.



- Get any of the following done;

- Fill in the width as well as height boxes with the canvas's dimensions. From the pop-up choices next to the Width and Height boxes, select the units of measurement you want to use.



- Choose Relative, and then insert the amount you would like to include or remove from the current canvas size of the picture. Insert a positive number to add to the canvas, and insert a negative number that should be deducted from the canvas.
 - Locate the Anchor, and choose a square to show where to place the existing picture on the new canvas.
 - Make a choice of an option from the Canvas Extension Color menu;
 - Foreground to fill the new canvas with the foreground color in use.
 - Background to fill the new canvas with the background

color in use.

- White, Gray, or Black to help with the filling of the new canvas with that color.
- Other to make a choice of a new canvas color with the use of the Color Picker.

Remember that the Color Picker can be opened by selecting the square on the right side of the Canvas Extension Color menu. If a photo doesn't have a background layer, it is impossible to find the Canvas Extension Color menu.

- Select OK.

Make a frame by increasing the size of the canvas

You can choose to design a picture frame by increasing the size of the canvas and getting it filled with a color. There is also an avenue for you to make use of one of the prerecorded actions to create a styled picture frame. It is best if you work on a copy of your picture.

- Launch the Actions panel. Click on Windows > Actions.
- Make a choice of frames from the Action panel menu.
- Select just one of the frame actions from the list.
- Choose the Play Selection button, the action will then play, building the frame around your picture.

How to add photos as layer design

In digital image editing, layers are utilized to segregate various aspects of an image. A picture can be placed over or beneath another image by applying imaging effects to a layer, which is analogous to transparency. They are now a necessary component of image editors. Different layers can be found in various programs, but not all of them. They either represent a portion of a picture as pixels or as instructions for editing. They are layered on top of one another, and the arrangement affects how the final image will seem. The various levels at which one might insert an object or picture file in graphics software are regarded as layers. When you design a digital image, layers can be defined, stacked, or combined in the program. Layers can be partially veiled, enabling specific images to be buried or displayed translucently within other images. Another way to integrate multiple digital photos into one is by using layers.

With these useful hints, you may learn how to handle and control Photoshop layers whether you're creating a challenging collage or importing a photo for editing. When using Photoshop, adding a photo as a layer gives you much control over the layer as a component of the larger composition and the ability to edit the photo. A fantastic place to start with photo editing is to learn how to add images as layers, which is a fundamental Photoshop ability. A wonderful approach to masking, making double exposures, making collages, and more is to combine photographs using layers.

Drag and drop

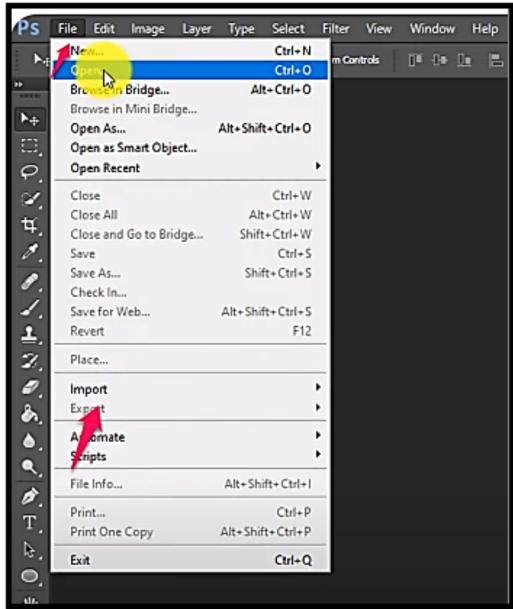
This can be described as one of the simplest methods to transform an image or a picture into a layer. All you have to do is move it into the canvas area of Photoshop. The app will instantly build a layer for the new picture.

Place and embedded or linked object

If you would like to embed a picture from a different location, locate File > Place. Do not forget that if you get to alter the initial picture that you have created a link to, there will be a need for you to update where the picture is linked to.

Import from a scanner or other device

With the use of the menu bar, choose File > Import > Images from Device and you can bring in pictures directly from a camera, scanner, or other connected device.



Copy and paste

You can just copy and paste your image onto a new layer after creating one. Simply right-click and press **Ctrl + C** on a PC or **Command + C** on a Mac.

How to adjust the layer size

In Adobe Photoshop, it's simple to change the size of a specific image layer without changing the size of the entire image. In graphic design and photo editing, this functionality has a wide range of uses. To balance your composition, you can change the layer size of an element whether you're creating a logo or an artwork. The quality of an image can be affected by repeated scaling. Your image remains crisp without losing pixels when you resize a layer using smart objects.

You can modify the size of a layer with the use of the Free Transform tool;

- Navigate to the Layers panel, and choose the layer or layers whose size you would like to alter.
- Choose **Edit > Free Transform**.
- While still holding the Shift key in order to stay clear of

distorting the picture, select and move the corners or the edges of the Transform border to alter the size or rotate the content.

- Tap Enter (On Windows) or Return (Mac OS) to complete your alterations.

How to adjust brightness and contrast

The level of color or grayscale disparity between various image characteristics in both analog and digital images is referred to as contrast. Images with higher contrast levels typically show more color or grayscale variation than images with lower contrast levels. After an image has been captured with a digital camera or converted to digital format by an analog-to-digital converter, its brightness (also known as luminous brightness) is measured. Brightness should not be confused with intensity (more correctly referred to as radiant intensity), which describes the amount of light energy that the microscope illuminator actually reflects from or transmits through the specimen. Brightness is actually better defined in terms of digital image processing as the measured intensity of every pixel that makes up an ensemble that makes up the digital image once it has been taken, processed, and presented. Pixel brightness is a crucial component of digital photographs because, aside from color, it is the sole parameter that processing methods may use to quantitatively alter the image.

You can make quick tweaks to an image's tonal range with the Brightness/Contrast adjustment in Photoshop. The image's highlights are expanded when the brightness slider is moved to the right; the shadows are expanded when it is moved to the left. The total range of tonal values in the image can be increased or decreased using the contrast slider. As with Levels and Curves adjustments, Brightness/Contrast applies proportionate (nonlinear) modifications to the image layer in normal mode. When Use Legacy is chosen, Brightness/Contrast simply moves the brightness of all pixel values up or down. Using Brightness/Contrast in Legacy mode is not advised for photography since it can result in clipping or loss of image detail in highlights or shadow areas (although it can be beneficial for altering masks or scientific imaging).

It is worth noting that Use Legacy is instantly chosen when modifying Brightness/Contrast adjustment layers designed

with former versions of Photoshop.

- Do one of the following;

- Choose the Brightness/ Contrast icon in the Adjustment panel.
- Pick Layer > New Adjustment Layer > Brightness/ Contrast.



- Choose OK in the New Layer dialog box.

It is worth noting also that you can make a choice of Image > Adjustments > Brightness/Contrast. Ensure you remember that this option makes direct adjustments to the image layer and does away with information regarding the image.

- In the Properties panel, move the sliders to modify the brightness and contrast. Moving to the left will lead to a decrease in the level, and moving to the right increases it. The number at the right of each slider shows the brightness or contrast value. Values can range from -150 to + 150 for Brightness and -50 to + 100 for Contrast.

Activity

1. Undo a command you have just recently initiated.
2. Straighten a picture you have and crop it.
3. Add a photo as a layer.

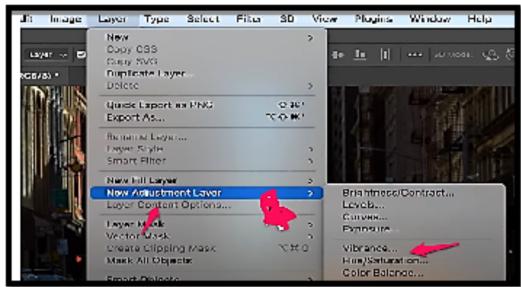
4. Modify the brightness and contrast of pictures in Photoshop.

CHAPTER 5

HOW TO ADJUST COLOR VIBRANCY

When beginning to edit their images, photographers frequently face the decision of whether to employ vibrance or saturation. It's crucial to comprehend how these tools affect your images if you want to increase your technical editing abilities or if you want to enhance your photos before publishing them on your photography website. Both vibrance and saturation can be used to intensify or lessen the colors in a picture, but they do so in quite different ways. Although you have definitely observed these discrepancies when editing, you might not be fully aware of the actual reasons why these seemingly equal tools produce such disparate outcomes. To find out more about the primary distinctions between vibrance and saturation and how to decide which one to employ, keep reading. Since it doesn't happen naturally, the term "vibrance" isn't actually used in photography. After creating a smart tool for more accurate color editing on their flagship programs Lightroom and Photoshop, Adobe came up with the idea. Photographers can use vibrancy to make subdued colors appear more intense while leaving rich colors alone. Images look considerably more even and natural as a result. Vibrance in Photoshop modifies the saturation to reduce clipping when colors get closer to being fully saturated. Less saturated colors have a greater rise in saturation as a result of this change than saturated colors do. Additionally, vibrancy keeps skin tones from becoming overly saturated.

- **Add an adjustment layer. Get any of the following done;**
 - In the menu bar, pick Layer > New Adjustment Layer > Vibrance.



- In the New Layer dialog box, type a name for the Vibrance adjustment layer and select OK.
 - In the Adjustments panel, choose the Vibrance symbol.

You can also select **Image > Adjustments > Vibrance**. But do remember that this method contributes a direct adjustment to the image layer and also discards information regarding the image.

- In the Properties panel, move the slider of the Vibrance to either increase or decrease the color saturation without having to clip when colors get more **saturated**. **Once that has been done, do any of the following:**
 - For the application of more adjustment to colors that are quite less saturated and also prevent clipping of colors as they attain total saturation, drag the slider of the Vibrance to the right side.
 - To include the same amount of saturation adjustment to all colors irrespective of their saturation at the moment, drag the Saturation slider.
 - To reduce the saturation, drag either the Vibrance or the saturation slider to the left.

How to modify the saturation and hue

Hue, saturation, and lightness (HSL) are terms used by photographers and artists to describe color. Hue can be thought of as the primary hue on the color wheel since it is the predominant wavelength of light that the human eye perceives as color. The term "saturation" refers to a color's intensity. The term "lightness" also describes how light or dark a hue is. A photo in grayscale or black and white has little color saturation, while a full-color image of a field of sun-dappled wildflowers can have a lot of it. The amount of

saturation you choose to apply will depend on your subject and your goals. Some images are inherently more saturated than others. Use saturation with caution, especially if you're looking for a natural aesthetic, as highly saturated photographs can appear unnatural. When photo saturation has been adjusted, many people can tell. People use color to assess the health of plants and the freshness of food, thus they immediately detect changes in unnatural saturation.

Larger variations in saturation may be used to produce strange visuals. However, while editing realistic images, be mindful of influences from the actual world to avoid overusing color. Think about the message you want to convey through your photos. Low saturation may give wistfulness to a photograph of a misty alpine lake taken in the early hours of the day. You might want an item of clothing's hues to stand out in fashion shots. Just keep in mind that minor adjustments frequently function better than drastic ones. You can also employ memory colors, which are the hues that come to mind when you think of particular objects more generally. You have experience with these things in life, so you know what an apple's red or a banana's yellow color should be. When adjusting saturation levels in portraits and other human-centered photographs, exercise extra caution. If you oversaturate, skin tones start to look unnatural and clothing starts to look painted on.

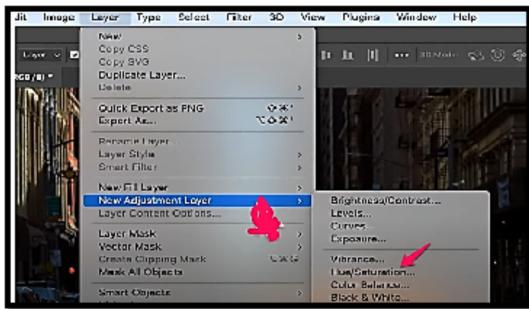
In the section below, you will learn how to adjust the saturation and hues in your images;

With the use of hue/saturation, you may change the hue, saturation, and lightness of a specific spectrum of colors in a picture or all the colors in the image at once. This adjustment is particularly useful for adjusting colors in a CMYK image so that they fit the output device's color gamut. With the use of hue/saturation, you may change the hue, saturation, and lightness of a specific spectrum of colors in a picture or all the colors in the image at once. This adjustment is particularly useful for adjusting colors in a CMYK image so that they fit the output device's color gamut.

Apply a Hue/ Saturation adjustment

- Add an adjustment layer. Do any of the following;
 - In the menu bar, make a choice of Layer > New

Adjustment Layer > Hue/Saturation.



- Pick OK in the dialog box of New Layer.
- In the Adjustment panel, choose the Hue/Saturation symbol.
- In the Properties panel, select the following options;
 - From the menu for Preset, select a Hue/Saturation preset.
 - Navigate to the menu on the right of the adjustment tool of On-image;
 - Pick Master in order to make an adjustment to all of the colors at the same time.
 - Make a choice of one of the other preset color ranges that have been listed for the color you would like to adjust
- If you would like to adjust the hue, get any of the following done;
 - Move the Hue slider or insert a value until you are well satisfied with the colors.

The values that are shown in the box are a reflection of the number of degrees of rotation around a color wheel from the initial color of the pixel. A positive value shows a clockwise rotation; a negative value shows an anticlockwise rotation. Values can range from -180 to +180.
 - Choose the On-image adjustment tool then tap Ctrl-click (Windows) or Command-click (Mac OS) on a color in the picture and move to the left or to the right in the photo in order to adjust the value of the Hue.

- To modify the saturation, follow one of the instructions;
 - Insert a value or move the slider of the Saturation to the right for an increase or to the left for a decrease. It is worth noting that values can be from -100 (percentage of desaturation, duller colors) to +100 (percentage of saturation increase).
 - Choose the On-image adjustment tool and select a color in the Image. Move to the left or right in the picture to reduce or increase the saturation of the color range which also includes the pixel you chose.
- For lightness, insert a value or move the slider to the right to get the lightness increased (add white to a color) or to the left side to reduce it (add black to a color). Note that values can range from -100 (percentage of black) to + 100 (percentage of white).

Specify the range of colors adjusted with the use of Hue/Saturation

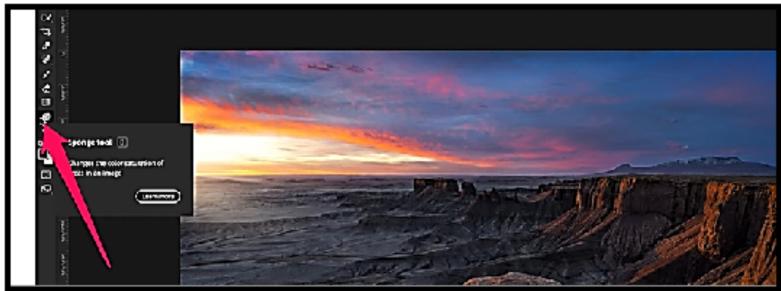
- Add a Hue/Saturation adjustment.
- In the Properties panel, make a choice of color from the menu to the right of the On-image adjustment icon. The adjustment sliders and their corresponding color wheel values will then be displayed between the two color bars.
- The two inner vertical sliders help with the definition of the color range.
- The two outer triangle sliders display where the adjustments on a color range “fall off” (note that fall-off can be described as a feathering or tapering of the adjustments rather than being sharply defined as an on/off application of the adjustment).
- With the use of either the eyedropper tools or the adjustment slider, modify the range of colors.
 - Select or move in the image with the use of the Eyedropper tool to choose a color range.
 - To enlarge the range, choose or move in the image with the Add To Sample Eyedropper tool.
 - To bring a reduction in the range of color, choose or move in the image with the Subtract from Sample Eyedropper tool.
 - While an eyedropper tool is chosen, you can also

tap Shift to include the range, or Alt (Windows) or Option (Mac OS) to deduct from it.

- Move one of the white triangle sliders to modify the amount of color fall-off (feathering of adjustment) without having to affect the range.
- Move the region between the triangle and the vertical bar to modify the range without having to affect the amount of fall-off.
- Move the center area to drag the whole adjustment slider (which includes the triangle and vertical bars) to choose a different color area.
- To change the range of the color component, drag one of the vertical white bars. A vertical bar that is moved away from the adjustment slider's middle and toward a triangle widens the color gamut and reduces falloff. The color range is reduced and the falloff is increased by moving a vertical bar away from a triangle and toward the center of the adjustment slider.
- Ctrl-drag (Windows) or Command-drag (Mac OS) the color bar so that another color will be at the center of the bar.

The name of the adjustment slider in the menu (to the right of the On-image adjustment button) changes to reflect the new color range if you change the slider's settings so that it falls into a different color spectrum. For instance, Yellow becomes Red 2 if you change Yellow's range so that it lies in the red portion of the color bar. Up to six of the distinct color ranges can be combined to create different shades of the same hue (for instance, Red through Red 6). When selecting a color component, the default color range is 30° wide with a 30° falloff on either side. A fall-off that is set too low will result in banding in the image. To alter the color saturation of specific areas in an image, use the Sponge tool. The Sponge tool slightly modifies an area's color saturation. In Grayscale mode, the tool alters the contrast of a picture by shifting the gray levels away from or toward the middle gray.

- Choose the Sponge tool in the toolbar.



- In the Options bar, configure the following;
 - Make a choice of brush tip and configure brush options.
 - Choose the method you would like to alter the color from the Mode menu;
 - **Saturate:** this helps to intensify the saturation of the color.
 - **Desaturate:** this helps to dilute the saturation of the color.
 - Indicate Flow to configure the rate of the saturation change.
 - Choose the Vibrance option to reduce the clipping for colors that are completely saturated or desaturated.
- Move over the aspect of the image you would like to alter.

How to unlock the background layer

Layers are advantageous because they enable you to add elements to an image and edit them individually without permanently altering the primary image. You can change the color and brightness of a layer, add special effects, move the content of a layer, specify opacity and blending values, and more for each layer. In addition, layers can be used to make web animations, reorder the stacking order, and link together to work on multiple things at once. Layers are similar to layered sheets of translucent glass on which you can paint pictures. The translucent portions of a layer allow you to see through to the levels below. You can try to achieve the desired effect by working on each layer separately. Up until the layers are combined (merged), each layer remains separate. The Background layer, which is the bottom layer in the Layers panel, is always locked (protected), thus unless you turn it into a regular layer, you cannot modify its stacking order, blending mode, or

opacity. When you use an opaque backdrop in Photoshop, such as a solid color, texture, or picture, the bottom layer immediately becomes the background layer and is partially locked so that you can't change its opacity or position in your stacking order.

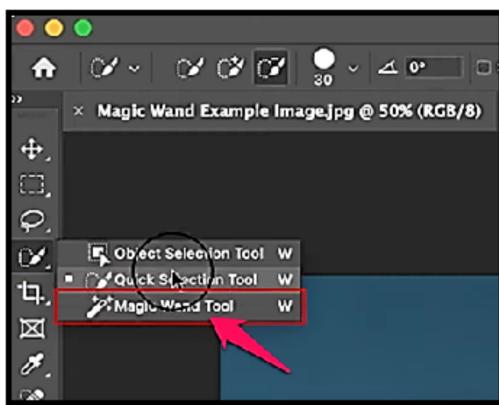
- By double-clicking the layer and choosing the option Layer from Background, you can totally unlock it and convert it into a regular layer.

How to use the Quick Selection

The Quick Selection Tool is a crucial component of the Tool panel in the Adobe Photoshop application. It is used to select a specific area of a raster object for editing purposes, and it is well known for its precision and time-saving features when used with high-resolution raster images. The user can easily understand how to use and apply the Quick Selection Tool to easily complete the mistaken task of selecting a specific area of an image and save valuable time. This tool can be used to quickly paint a selection with the use of an adjustable round brush tip. As you move, the selection becomes enlarged outward and instantly locates and goes after the defined edges that are in the image.

To make use of this amazing tool, follow the steps below;

- Choose the Quick Selection tool. If you are unable to locate this tool, hold down the Magic Wand tool.



- Navigate to the options bar, and choose any of the selection options; New, Add To, or subtract from. Note that new is the default option if you do not choose any option. Once you have

made the first choice, the option will instantly change to Add To.

- If you would like to alter the brush tip size, choose the Brush pop-up menu in the options bar, insert a pixel size, or move the slider. Make use of the Size pop-up menu choices to make the brush tip size sensitive to pen pressure or a stylus wheel.

Note however that when you are creating a selection, tap the right bracket in order to increase the Quick Selection tool brush tip size; touch the left bracket to reduce the brush tip size.

- **Make a choice of the Quick Selection options;**

- **Sample All Layers:** this option helps with the building of a selection that depends on all layers rather than just the layer currently chosen.
- **Enhance Edge:** this helps with the reduction of roughness and blockiness in the selection boundary. Enhance Edge instantly flows the selection more to image edges and adds some of the edge refinement that you can add manually in the Select and Mask workspace.
- The area of the image you wish to select should be painted inside. The variety expands as you paint. If updating is sluggish, keep dragging to give the selection time to finish being worked on. The selecting area expands to follow the boundaries of the object as you paint close to them.
 - To remove from a selection, choose the Subtract From option in the options bar, and then move over the existing selection.
 - To switch temporarily between add and subtract modes, press and hold down the Alt (Win) or Option (Mac) key.
 - To alter the tool cursor, pick Edit > Preferences > Cursors > Painting Cursors (Win) or Photoshop > Preferences > Cursors > Painting Cursors (Mac). Normal Brush Tip shows the standard Quick Selection cursor with a plus or minus sign in order to display the selection mode. If you desist from moving and then choose or drag in a close portion, the selection will grow to add the new area.
- Choose the Select and Mask to further brings adjustment to

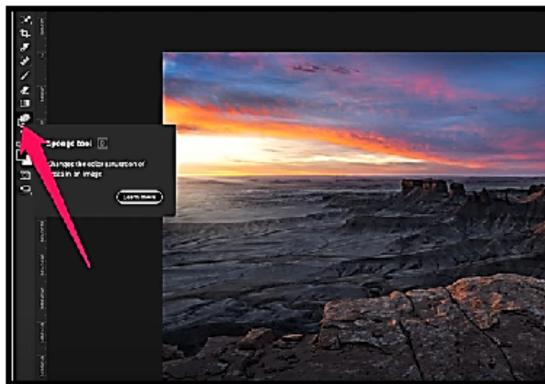
the selection boundary.

How to use Lasso tools

The standard Lasso tool is a freehand selection tool, meaning it won't try to predict what you want to choose or automatically snap to object edges. Your lasso will stay put wherever you lay it. However, Photoshop will assist in filling in the minor gaps between your endpoint and starting point to complete your shape. The Lasso tool provides additional features to help you work more quickly and efficiently, similar to many Photoshop selection tools. You can precisely choose your work as you need to by adding to, subtracting from, and intersecting previous choices. Your lasso's roughness can be adjusted using the feathering and anti-alias settings, allowing you to experiment with softer or sharper edges. Anti-aliasing makes your lines smooth while high feather offers you more room for fuzzier shapes.

With the Polygonal Lasso tool or the Magnetic Lasso tool; change how you make freehand selections. The latter builds polygonal shapes by converting your freehand lines into straight lines while the former attempts to snap to the boundaries of an item using AI.

- Choose the Lasso tool, and configure feathering and anti-aliasing in the options bar.



- If you would like to add or deduct from, or intersect with a selection that exists, choose the corresponding button in the options bar.
- Get any of the following done:
 - Move to draw a freehand selection border.

- If there is a need for a switch between freehand and straight-edged segments, tap Alt (Windows) or Option (Mac OS), and choose where segments ought to start, press and hold down the Delete key.
- If you would like to close the selection border, let go of the mouse without having to hold down the Alt key or Option.
- Finally you can choose to pick Select and Mask if you would like to adjust the selection boundary more.

Choose with the Polygonal Lasso tool

The Polygonal Lasso tool is quite useful for the drawing of straight-edged segments of a selection border.

- Choose the Polygonal Lasso tool and choose options.
- Indicate one of the selection options in the option bar.
- Configure feathering and anti-aliasing in the options bar.
- Click in the image to configure the starting point.
- **Do one or more of the instructions below;**
 - If you would like to draw a straight segment, place the pointer where you would like the first straight segment to end, and click. Proceed to click to configure endpoints for subsequent segments.
 - To draw a straight line at a multiple of 45 degrees, press and hold down shift as you drag to choose the next segment.
 - To draw a freehand segment, hold down Alt (Windows) or Option (Mac OS), and move. When you are done, let go of the Alt or Option and the mouse button.
 - To erase straight segments that have just been drawn, tap the Delete key.
- Close the selection border:
 - Place the Polygonal Lasso tool pointer at the top of the starting point (a closed circle will be displayed close to the pointer), and click.
 - If the pointer is not at the top of the starting point, click twice on the Polygonal Lasso pointer, or Ctrl-click (Windows) or Command-click (Mac OS).
 - Choose Select and Mask to adjust the selection boundary much more.

Activity

1. Adjust the color vibrancy in any of your pictures.
2. Modify the saturation and hue of a picture.
3. What is the Quick Selection tool and what is it used for?
4. Mention two subtools under Lasso tools.

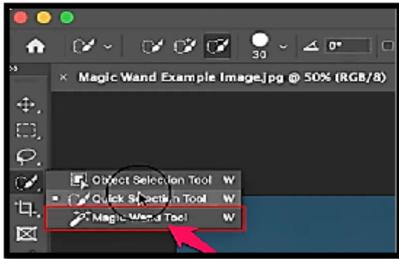
CHAPTER 6

USING THE MAGIC WAND TOOL

One of the first selection tools in Photoshop is the Magic Wand Tool, also referred to as the Magic Wand. The Magic Wand chooses pixels in a picture based on tone and color as opposed to other selection tools that do so based on forms or by spotting object boundaries. The unpleasant moniker "tragic wand" was given to the Magic Wand by many users since it frequently seems impossible to control which pixels the instrument chooses. The Magic Wand tool uses machine learning to recognize what you might be trying to choose and then automatically selects that object or portion of your image. Clicking on the sky will choose the sky; but, clicking on someone's face will select their full face in a matter of seconds. For those who are new to Photoshop, the Magic Wand tool can be said to be quite a perfect way to commence choosing parts of your image and modifying them with targeted editing tools such as layer masks. Not just for beginners now, experts can also personalize their settings like tolerance, sample size, and anti-aliasing to get precise control over the way that the selection tool behaves. You can also effectively control the manner in which the Magic Wand makes selections if you are not content with the manner in which it chooses, the layers it focuses on, and lots more. There are times when selection is not just straightforward, the Magic Wand tool offers the ability to include selections that exist, subtract from them, or get them intersected and also chooses the solution that works best for you.

To make a selection with the use of the Magic Wand tool, follow the instructions below;

- Choose the Magic Wand tool and if the tool is not visible you can gain access to it by pressing and holding down the Quick Selection tool.



- Indicate one of the selection choices in the options bar. The pointer of the Magic Wand tool will change based on the option that is chosen.
- In the options bar, indicate any of the following;
 - **Tolerance:** identifies the color gamut of the chosen pixels. Enter a number in pixels between 0 and 255. Low values choose the few colors that are most comparable to the clicked pixel. A greater value chooses colors from a wider spectrum.
 - **Anti-aliased:** helps with the creation of a smoother-edged selection.
 - **Contiguous:** chooses just the adjacent parts making use of the same colors. Otherwise, all pixels in the whole picture making use of the same color will be chosen.
 - **Sample All Layers:** chooses colors making use of data from all the layers that can be seen. Otherwise, the Magic Wand tool chooses from the active layer alone.
- In the picture, choose the color you would like to make use of. If Contiguous is chosen, all adjacent pixels that are in the tolerance range will be chosen. Else, all pixels in the tolerance will be chosen.
- Choose Select and Mask so you can further modify the selection boundary or see the selection against diverse backgrounds or in the form of a mask.

To use the Magic Wand in the selection of an object you would like to isolate, follow the steps below;

- Choose the Magic Wand tool.
- In the tool options bar, indicate a selection option; New Selection, Add to Selection, Subtract from Selection, or Intersect with Selection.
- Drag the pointer in your canvas and choose the color in the

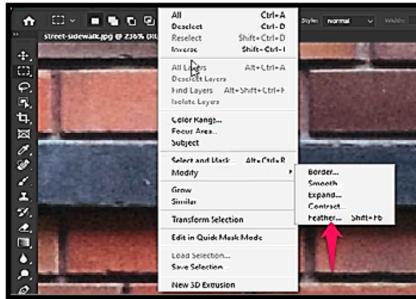
picture that you would like to choose.

- Configure the following in the options bar, Tolerance, Anti-aliased, and Sample All Layers options.
- Uncheck Contiguous if you would like to choose nonadjacent aspects of similar color.

How to use the Magnetic Lasso tool

The magnetic lasso tool is a tool used by experts in photo editing to pick out a specific subject in a picture. Because of this, these experts can modify the chosen image or background without affecting the properties of another layer. Other lasso tools that let you pick out and isolate a certain image from the background of a picture include the Polygonal lasso tool and the lasso tool. The magnetic lasso tool is mostly used by experts to highlight a particular area of an image. This enables them to change each layer separately to provide the desired effect by moving this section to another layer. This can assist experts in removing particular elements from an image. For instance, if a photographer wanted to blur the background of a still shot of a bumblebee; they could use the magnetic lasso tool to draw a magnetic lasso around the bumblebee's image. This would give them the ability to blur the backdrop image, add the bumblebee to it, and then place it on another layer. This would alter how the image is perceived and catch the photographer's eye. Whenever you make use of the Magnetic Lasso tool, the border will snap to the various edges of the specified areas in the picture. The Magnetic Lasso tool is however not available for 32-bit per-channel pictures. It is worth noting that the Magnetic Lasso tool is basically useful for swiftly choosing objects that have complex edges configured against high-contrast backgrounds.

- Choose the Magnetic Lasso tool.
- Indicate one of the selection choices in the options bar.
- Configure feathering and anti-aliasing in the options bar.



● Configure any of these options;

- **Width:** if you would like to indicate a detection Edith, insert a pixel value for Width. The Magnetic Lasso tool gets informed about the edges alone within the indicated distance from the pointer. If you would like to alter the lasso Pinter so that it helps to show the lasso width, tap the Caps Lock key. You can also alter the pointer while the tool is chosen but not being used. Tap the right bracket to bring an increase to the Magnetic Lasso edge width by 1 pixel; touch the bracket on the left to bring a reduction to the width by 1 pixel.
- **Contrast:** in order to indicate the sensitivity of the lasso to edges in the picture, insert your preferred value between 1% and 100% for Contrast. A much higher value will then help with the detection of just the edges that are in sharp contrast with their surroundings; a much lower value helps to detect lower-contrast edges.
- **Frequency:** if you would like to indicate the rate at which the lasso configures fastening points, insert a value between 0 and 100 for Frequency. A much higher value will help with the anchoring of the selection border in place in a swifter manner. Remember that on a picture that has well-specified edges, attempt a higher width and a much higher edge contrast, and then trace the border in a rough manner. On a picture that has quite softer edges, attempt a lower width and lower edge contrast, and try to locate the border in a more precise manner.
- **Stylus Pressure:** If you happen to be working with a stylus tablet, choose or deselect the option of Stylus Pressure. Once this choice has been chosen, an increase in stylus pressure will help reduce the edge width.

- Select the picture to configure the initial fastening point. Fastening points anchor the selection border in place.
- Let go of the mouse button or continue to press it, and then drag the pointer along the edge you would like to trace. The most recent part of the selection border will still be active. As the pointer is dragged, the active segment snaps to the edge in the picture that is the strongest, depending on the detection width configured in the options bar. Periodically, the Magnetic Lasso tool includes fastening points to the selection border in order to anchor the former portions.
- If the border does not snap to the preferred edge, choose once to include a fastening point in a manual manner. Keep on tracing the edge, and include fastening points if there is a need for it.
- **If there is a need for you to switch temporarily to the other lasso tools, get any of the following done;**
 - If you want to get the Lasso tool activated, hold down Alt (Windows) or Option (Mac OS), and then move while tapping the button of the mouse.
 - To get the Polygonal Lasso tool activated, hold down Alt (Windows) or Option (Mac OS), and then make a click.
- To clean segments that have just been drawn and fasten points, tap the Delete key until you have cleaned the fastening points for the preferred segment.
- **Close the selection border;**
 - To get the border closed with the use of a magnetic segment, click twice, or tap Enter or Return. If you would like to manually close the border, move over to the starting point and click.
 - To close the border with the use of a straight segment, press and hold down the Alt key (Windows) or Option (Mac OS), and make a double-click.

How to use the Polygonal Lasso Tool

When you need to choose an odd, angled shape, you use the Polygonal Lasso. It works well for shapes that lack proportion and are hence unsuitable for the marquee. It is also the best option for intricate, multi-sided shapes. The fact that this lasso tool combines the accuracy of a marquee with the customization of a conventional

lasso tool may be its biggest advantage. There are numerous applications for this tool, most of which involve deleting or changing image backgrounds. With this lasso, you can effortlessly duplicate designs without any dimensional restrictions. The polygonal lasso tool, like all lasso tools, is helpful for picking any area of a photo to use or edit separately. This tool can also be used to make simple custom borders and frames for photos. You won't be restricted by the sizes of pre-existing frames.

The functionality offered by this tool is largely the same as those of other lasso tools.

- Using "Add and Remove" on the Options Toolbar, you can change your selection after you've chosen an area.

By using the Intersect tool, you can further narrow your selection. To make a border that merges more into the background, you can add feather selection lines. Although it is less exact, feathering can be used to make a more nuanced separation between your selection and the background. Another choice is anti-aliasing. By doing this, you can eliminate any jagged edges that can show up while copying and pasting picture choices.

When you master Photoshop, you'll probably use the Polygonal Lasso more frequently than any other selection tool. It is useful when you need to make rapid, accurate adjustments but don't have the time to make more complex ones. To choose more challenging forms, you can also use this tool in conjunction with the other lasso tools. For instance, you could choose the ice cream cone's foundation using the Polygonal Lasso and then add the scoop of ice cream to the selection with the Circle Marquee. Since the Polygonal Lasso is, well, polygonal, it can be challenging to work with curved lines. Use the conventional lasso or magnetic lasso tool for them. To get around this problem, you can combine polygonal with the common Lasso. If you require regular shapes, you should likewise stay away from the Polygonal Lasso. For shapes like squares, rectangles, and circles, the simple marquee tools are more than adequate, therefore there is no need to utilize polygonal.

Types of Eraser Tools

When you commence a project in Photoshop, there may be elements of the initial image that you have no need for. There

might also be quite an awkward figure in the background, a log that you need to delete, or any other imperfection that needs to be removed. In this situation, it is most likely that you make use of the Eraser tool. This amazing tool, just like the class pink pencil eraser you must have used when you were in basic school, helps to take off elements from your work that are not needed anymore or were there by mistake in the first place. If you are making use of a picture with a background layer, the Eraser will go back to that layer to the selected color in the background. If you alter the layer of the background into a normal layer, the Eraser will remove the pixels altogether, ensuring that you have quite a clean, transparent slate that is ready for more modification.

The Eraser has features that are just like that of the brush tools in Photoshop that you are already familiar with. You can choose to alter the brush size so that you are able to better accommodate fine details or big elements; there is also a pencil configuration that can be used for very few mistakes. You can also choose to modify the opacity of the Eraser, which enables you to keep some of the pigment on the layer to take it off totally.

This tool also has some additional erasers. The Background Eraser will take off the parts of the picture that match the background color you chose. This tool can be quite finicky due to the fact that it depends on a constant sampling of background colors; hence, there is no need to be afraid to play around to get a hold of it. The Magic Eraser enables you to have some more freedom with cleaning hues. When you make a choice of this tool, you can remove all of the pixels in a specific hue, ensuring that it becomes much easier to modify a file if you are seeking to modify the color scheme. This is a unique tool that can be used to get rid of wide areas of a certain color.

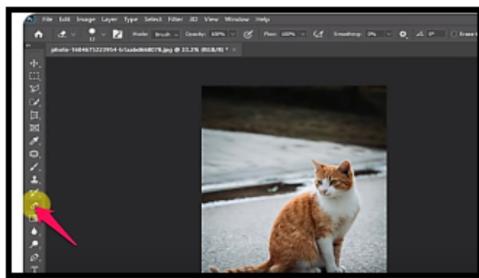
Photoshop users occasionally might like the Masking tool over the Eraser. The Eraser tool works great for projects containing bits or layers you want to entirely eliminate, but the Masking tool is simpler to undo. For instance, you don't need a runway or onlookers if you just want to maintain the image of a fashion model strutting her stuff. The Background Eraser can assist you in removing everything unnecessary so that you can concentrate on the crucial components. After that, you can clear up everything with a standard eraser. Additional mathematical modification can also be done with

the help of this tool. The Eraser works at 90-degree angles for Photo-shopping which calls for structure if the image you're working on has sharp angles or geometric features.

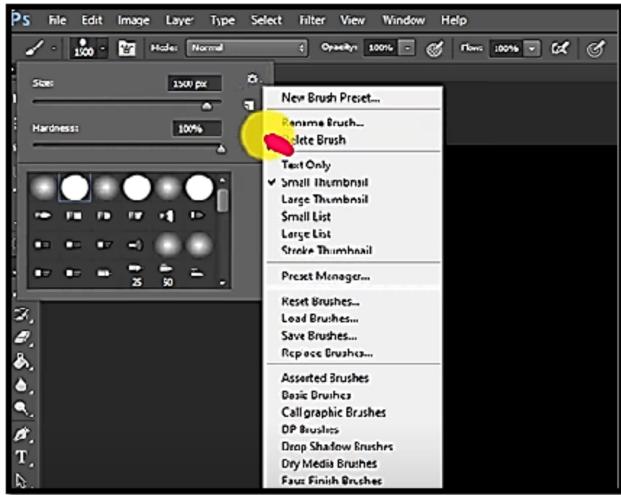
Erase with the Eraser tool

The Eraser tool converts pixels to transparent or background color. The pixels change to the backdrop color if you are editing a background or a layer with locked transparency; otherwise, the pixels are wiped to transparency. The impacted area can also be restored to a state chosen in the History panel by using the eraser.

- Choose the Eraser tool.



- Configure the background color you would like to include if you happen to be erased in the background or a layer that has a locked transparency.
- In the options bar, make a choice of a Mode setting. Brush and Pencil configure the eraser so it behaves like those tools. Block is a hard-edge, fixed-sized square with no choices to alter the opacity or flow.
- For the Brush and Pencil modes, pick a brush preset, and configure Opacity and Flow in the options bar.



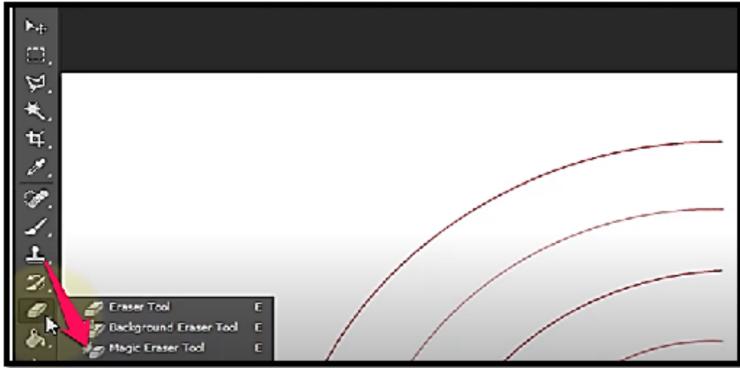
Opacity of about 100% will take pixels off totally. A much lower opacity will also take off pixels in a partial manner.

- If you would like to clean off a saved state or snapshot of the image, choose the left column of the state or snapshot in the History panel, and then choose Erase to History in the options bar. If there is a need for temporary use of the Eraser tool in the Erase To History mode, hold down the Alt key (Windows) or Option (Mac OS) as you move in the picture.
- Move through the area you would like to remove.

Change similar pixels with the Magic Eraser tool

Whenever you choose a layer with the use of the Magic Eraser tool, the tool will alter all similar pixels to transparent. If you happen to be working in a layer that has a locked transparency, the pixels will be changed to the background color. If you click in the background, it is changed to a layer and all similar pixels alter to transparent. You can choose to remove contagious pixels or pixels that are almost like those on the current layer.

- Choose the Magic Eraser tool.



- Get any of the following done;

- Insert your preferred tolerance value such that you can define the range of colors that can be taken off. A low tolerance takes off pixels within a range of color values that are quite similar to the pixel you select. A high tolerance will then extend the range of colors that will be removed.
- Choose Anti-aliased to smoothen the edges of the aspect you erase.
- Choose Contiguous to remove just the pixels that are contagious to the pixel you selected, or you can also choose to deselect to take off all pixels that look alike in the picture.
- Choose Select Sample All Layers to make a sample of the erased color with the use of combined data from all layers that are visible.
- Indicate opacity to make a definition of the strength of the erasure. Opacity of 100% removes pixels totally. A lower opacity will take off pixels in a partial manner.

Change pixels to transparent with the Background Eraser tool

As you drag, the Background Eraser tool transparently deletes pixels from a layer. The boundaries of a foreground object can be preserved while the backdrop is erased. You can regulate the range of transparency and boundary sharpness by providing various sample and tolerance choices. The hotspot, also known as the center of the brush, serves as a sample for the background eraser, which removes that color from all other locations inside the brush. In order to prevent color halos from appearing if a foreground object

is later pasted into another image, it additionally does color extraction at the margins of any foreground objects. Keep in mind that QuickSelect should be used to remove the background from an object with complicated or delicate edges. Additionally, the background eraser overrides a layer's lock transparency setting.

- Navigate to the Layers panel, and choose the layer that has the areas you would like to take off.
- Choose the Background Eraser tool. If you are unable to locate the tool, hold down the Eraser tool, and then choose the Background Eraser from the menu that pops up.
- **Choose the brush sample in the options bar, and configure brush choices in the pop-up panel;**
 - Make a choice of configurations for the Diameter, Hardness, Spacing, Angle, and Roundness choices.
 - If you are making a pressure-sensitive digitizing tablet, select options from the Size and Tolerance menus to vary the size and tolerance of the background eraser over the course of a stroke. Select Pen Pressure to place the variation on the position of the pen thumbwheel. Select Off if you do not have a need to vary the size or tolerance.
- **Get the following done in the options bar;**
 - Choose a Limits mode for erasing: Discontiguous to remove the sampled color anywhere it occurs beneath the brush; Contiguous to remove parts that have the sampled color and are in a way or the other connected to one another; and Find Edges to remove areas that are connected and have the sampled color while better keeping the sharpness of shape edges.
 - For Tolerance, insert a value or move the slider. A low tolerance limits erasure to places that are quite similar to the sampled color. A high tolerance removes a wider range of colors.
 - Choose Protect Foreground Color for the prevention of the erasure of parts that match the foreground color in the toolbox.
 - Choose a Sampling option: Continue to sample colors continuously as you move; once to remove just the parts that have the color you click first; and Background

Swatch to remove just parts that have the current background color.

- Move through the part you would like to erase. The Background Eraser tool pointer displays a brush shape that has a crosshair showing the hot spot of the tool.

Auto Erase with the Pencil tool

There is also an Auto Erase option for the Pencil tool which enables you to paint the background color over the parts that have foreground color.

- Indicate foreground and background colors.
- Choose the Pencil tool.
- Pick the Auto Erase in the options bar.
- Move over the image. If the middle of the cursor is at the top of the foreground color when you commence moving, the area is removed from the background color. If the middle of the cursor is at the top of the part that does not have the foreground color when you commence moving, the area is painted with the use of the foreground color.

How to use white balance

The color temperature at which white objects on film seem to be white is referred to as white balance. But it's not just about how white appears; how you set your white balance affects every hue in your photograph. This is why every scene, from lighting to post-production, is planned by photographers and filmmakers taking into account the white balance. Distinct light sources have distinct colors because every particle of light is located on a color temperature scale. Consider the contrast between a candle's warm orange glow and a fluorescent light's chilly, nearly bluish beam. Filmmakers use the Kelvin scale to gauge the temperature of color. Incandescent bulbs or sunset are two examples of colors that are warmer and more on the red, orange, and yellow side of the spectrum when they are at lower temperatures. Colors have a cooler hue cast when the temperature is greater. On this blue end of the spectrum, natural light is found. The color temperature of the light affects the appropriate white balance for a scene. "In the simplest terms, your white balance informs you that your color temperature is off if your whites are off. You must determine whether your

camera is set to the incorrect color temperature or whether your illumination is the problem if your color temperature is off.

Gauging white balance in various lighting situations

Understanding the various lights' color temperatures is the first step in resolving any white balance problems that may arise on set. To maintain your white balance unless you work in a controlled setting where you can regulate the color temperature of your light sources, you'll need to become familiar with a few common situations.

Daylight

Outdoor natural light has a typical temperature of 5,600 degrees Kelvin (K). This means that you would need to set your white balance to 5,600 K if you wanted a white sheet of paper to appear white in your photograph. Although it is the industry norm, this setting is only a starting point. A day with a blue sky and sunshine may be a little warmer than one with a dark, overcast sky. Almost usually, high noon will have a substantially lower color temperature than sunset and sunrise.

Tungsten

The typical temperature for tungsten light, often known as interior lighting, is 3,200 K. If you move your piece of paper from outdoors to inside, you must adjust your white balance to account for the warmer color temperature because light bulbs and other artificial illumination are often warmer than outside lighting. Similar to natural light, tungsten settings come in a variety of tones, from warm incandescent lights to LEDs that are closer to natural light.

Adjust your white balance settings in-camera

Cameras can't instantly adjust to varied color temperatures like human eyes can. Your camera needs to be instructed on the appropriate white balance for a specific scene. Although you can change this in post-production, it's preferable to achieve the most precise white balance in the camera. By doing this, you can save time in the long run and make sure that your footage contains the right visual information for editing. This does not require that you get exact accuracy. The majority of digital cameras can shoot in raw

format, which gives you a lot of flexibility for post-processing. Hara advises beginning with a predetermined white balance, such as tungsten or daylight and then manually tweaking from there. Here are some of the various alternatives you have for how to go about doing this.

- Automatic white balance or manual white balance? Auto white balance is a very great choice for starters. The configuration of the white balance of your camera is likely quite good at reading ambient light and also making well-balanced adjustments on its own. But if you are just a more seasoned videographer, you can consider switching to custom white balance to offer yourself more control. You will also like to configure white balance yourself in tricky lighting conditions that can easily get the judgment of the camera.
- White balance cards and gray cards: Oftentimes, professionals make use of these cards in order to aid in getting the proper exposure and white balance for their shot. A white balance card is simply a fancy term for something that is white. An official card will provide you with the most specific tone and anti-reflective finish, but you can make use of any pure white object as a stand-in. This card serves as a form of reference for your camera; it makes it much easier for you to test for the proper balance in circumstances where you are not aware of the color temperature.

A gray card is like a white card in the fact that both are reference points to gauge white balance and exposure. But a gray card is a certain shade of gray created to be totally neutral. This then makes it much easier for your camera to be able to read the light and make a choice of the best white balance. If you would like to make use of a gray card, all you have to do is position it at the front of the camera while on custom white balance mode and then take some shots. This can be described as the manual version of making use of AWB, in which your camera looks for neutral areas for itself in the frame. White balance is a key factor for every filmmaker, from pre- to post-production. Start with automatic white balance and make adjustments from there if you're unsure how to develop your eye for white balance. Don't worry about getting everything perfect; there is plenty of room for editing in raw files. Try to experiment and become acquainted with the temperature ranges

associated with each color. Pay attention to the light offset to improve your ability to judge white balance on set. You'll be astonished at how quickly you can develop an eye for various temperatures and white balances if you pay attention to the lighting around you in daily life.

Learning about Color Temperatures

Color temperature, which is expressed in degrees Kelvin, describes the warmth or coolness of visible light. From a scientific perspective, black-body radiation underlies all visible light. The energy that emerges from a black-body radiator seems to be light. The temperature of the energy being radiated determines the hue of that light. Because of its associated Kelvin temperature, an incandescent light bulb, for instance, produces warm white light. Filmmakers and photographers need to understand color temperature because it serves as the basis for all light and color post-production work. The temperature of the light is where white balance, color correction, and color grading all begin. Learn the fundamentals of color temperature so you can accurately balance your color for various lighting situations in the camera. Any filmmaker will tell you that using smart lighting in the field will make color grading and correction much simpler in the future.

Color production in post-production editing

In the post-production stage, where your color balance affects color grading, the choices you make in the field are crucial. This procedure has two parts: color grading and color correction.

Color correction

Correcting an image's white balance, exposure, and contrast is known as color correction. This is a scientific procedure; by looking at graphs, you may establish the ideal exposure, the black-and-white values, and the white balance of a picture. Your task is to choose a color temperature that balances the whites and provides you with a solid foundation from which you can simply transition into the creative side.

Color grading

The artistic counterpart of color correction science is called color

grading. Once the values are in balance, you can make arbitrary decisions to change the light's color to your preference. To create a stylized aesthetic or mood, you can adjust chromaticity, also referred to as hue and saturation, along with temperature. "Perhaps you want to imitate the orange light of golden hour, or you want a scene to feel warmer because it's an emotional scenario. You might lower your color temperature in these situations to use warmer colors. Different color temperatures reflect various situations and moods. It's critical to understand the visual impacts that various lighting setups will have on your video. Due to their cooler color temperatures, fluorescent lights, bright white CFL (compact fluorescent lamp), and halogen bulbs perform well in sterile, professional situations. However, warm light sources, like fire, incandescent lights, or sunsets, evoke pleasant feelings in people because of their lower Kelvin temperatures.

Color Adjustments

The powerful tools in Photoshop can help with the enhancements, repair, and correction of the color and tonality (lightness, darkness, and contrast) in a picture. Below are some of the items worth considering prior to making color and tonal modifications.

- Work with the use of a monitor that is well-calibrated and profiled. For important image editing, calibration and profiling are quite important. Otherwise, the picture you see on your monitor will look quite different on other monitors or when you print them.
- Make plans to make use of the adjustment layers to modify the tonal range and color balance of your picture. Adjustment layers enable you to return and create successive tonal adjustments without a need to discard or totally alter the date from the image layer. Bear in mind that making use of adjustment layers increases the size of the file of the image and places demand on the RAM from your computer. Getting access to the color and tonal commands in the adjustment panel instantly builds adjustment layers.
- If you would not like to make use of adjustment layers, you can add adjustments in a direct manner to a picture layer. Ensure you take note that certain picture information is often

discarded when creating a color or tonal adjustment directly to a picture layer.

- For critical work and maximum preservation of image data, it is best if the picture you are making use of is 16 bits per channel (16-bit image) as against 8 bits per channel (8-bit image). Data is lost away when you create tonal and color adjustments. The loss of picture information is more important in an 8-bit image than that of a 16-bit image. Basically, 16-bit images have a much larger file size than 8-bit images.
- Make a duplicate or another copy of the picture file. When you work on a copy of your picture, it helps to preserve the initial one in the event that there is a need for you to make use of the picture in its initial state.
- Take off any flaws like dust spots, blemishes, and scratches from the picture prior to making color and tonal adjustments.
- Open the Infor or Histogram panel in an expanded view. As you make an evaluation and correction of the picture, both panels will show invaluable feedback on your modifications.
- You can also make a selection or make use of a mask for the confinement of your color and tonal adjustment to an aspect of a picture. Another way to add color and tonal adjustments in a selective manner is to configure your document with image components on various layers. Color and tonal adjustments are added to just one layer at a time. Just the picture components on the layer that are targeted will be affected.

Correcting Images

Below is the general workflow you can take when you make corrections to the tonality and color of a picture;

- Make use of the histogram to look out for the quality and tonal range of the picture.
- Ensure that the Adjustment panel is open and can access color and tonal adjustments. Choose an icon to access the adjustments described in the steps below. Adding corrections from the Adjustments panel helps with the creation of an adjustment layer, which offers you quite more flexibility and in no way discards information.
- Modify the color balance to take away unwanted color casts

or for the correction of over saturated or undersaturated colors.

- Modify the tonal range with the use of the Levels or Curves adjustments. Commence tonal corrections by modifying the values of the extreme highlight and shadow pixels in the picture, configuring an overall tonal range for the image. This process is regarded as configuring the highlights and shadows or configuring the white and black points. Configuring the highlights and shadows basically helps with the redistribution of the mid-tone pixels in an appropriate manner. Nevertheless, there might be a need for you to alter your midtones manually. The shadow/highlight command can be used in adjusting the tonality on shadow and highlight portions.
- Once you have corrected the overall color balance of your picture, you can create optional adjustments to improve colors or give off special effects.
- Sharpen the edges of the picture. As one of the last steps, make use of the Unsharp Mask or the Smart Sharpen filter for the sharpening of the clarity of edges in the picture. The amount of sharpening needed for a picture varies in accordance with the image quality produced by the digital camera or scanner you are using.
- Target the image for printer or press features. You can make use of options in the Levels or Curves adjustments to bring in highlight and shadow information into the gamut of an output device such as a desktop printer. This process can also be done if you are transferring pictures to a printing press, and have knowledge of the features of the press.

Since sharpening brings about an increase in the contrast of pixels that are close, it is possible that certain pixels in very critical places might become unprintable on the printer or press that you are making use of. Due to this, it is best that you fine-tune the output settings after you have sharpened them.

Adjustment panel overview

The Adjustments panel contains the tools needed to make color and tone adjustments. An adjustment is selected and an adjustment layer is automatically created when a tool icon is clicked. Non-destructive adjustment layers are produced by the adjustments you

make using the controls and choices in the Adjustments panel. The adjustment presets are available in the Properties panel's Presets menu. Levels, Curves, Exposure, Hue/Saturation, Black and white, Channel Mixer, and Selective Color all have presets available. A preset is applied to the image using an adjustment layer by clicking it. Adjustment settings can always be saved as a preset and added to the preset list. The settings options for a particular adjustment are displayed when you click an adjustment icon or a preset.

Apply a correction using the Adjustment panel

- In the Adjustments panel, choose your preferred adjustment symbol or make a choice of an adjustment from the panel menu.
- Make use of the controls and options in the Properties panel to add the configurations you would like to use.
- **Get any of the following done;**
 - To toggle the visibility of the adjustment, choose the Toggle Layer Visibility button.
 - To take the adjustment back to its initial configuration, choose the Reset button.
 - If you would like to discard an adjustment, choose the Delete This Adjustment Layer button.
 - To enlarge the width of the Adjustment panel, move the bottom corner of the panel.

Apply a correction to just the layer below

- In the Adjustments panel, choose your preferred adjustment symbol or choose an adjustment from the panel menu.
- For adjustments, choose the Clip to Layer button. Choose the icon once more to ensure that the adjustment applies to all layers beneath it in the Layers panel.

Save and apply adjustment presets

The tool you selected in the Adjustments panel's Presets panel Preset menu contains the adjustment presets for that tool. Additionally, settings for Levels, Curves, Exposure, Hue/Saturation, Black and white, Channel Mixer, and Selective Color can be saved and used later. The preset list is expanded when you save a preset.

- If you would like to save adjustment configurations as a panel, select the Save Preset choice from the Properties panel

menu.

- To add an adjustment preset, make a choice of a preset from the Preset menu in the Properties panel.

Make a color adjustment

The basic operation of each Photoshop color adjustment tool is to translate an existing range of pixel values to a new range of values. The degree of control each tool offers distinguishes it from the others. The Adjustments panel provides access to color correction tools and their option settings. There are various techniques to change an image's color. Using an adjustment layer is the method with the most flexibility. Photoshop automatically produces an adjustment layer when you use a color adjustment tool from the Adjustments tab. You can experiment with color and tone tweaks using adjustment layers without permanently changing the image's pixel composition. The adjustment layer, which serves as a window through which the underlying image layers may be seen, contains the color and tone adjustments.

- If you would like to make adjustments to a part of your image, choose that portion. If you do not make a selection, the adjustment is added to the whole image.
- **Ensure you do any of the following;**
 - Choose an adjustment symbol in the Adjustments panel.
 - Design an adjustment layer.
 - Click twice on the thumbnail of an adjustment layer that exists in the Layer panel.

To apply adjustments directly to the image layer, keep in mind that you can also

- Select Image > Adjustments and then select a command from the submenu. Remember that this technique throws away image data.

The layer mask on a new adjustment layer is by default empty (or white), which means that your adjustment is applied to the entire image. When you add an adjustment layer to an image with an active selection, the first layer mask blackens out the area that is not chosen. You can paint black areas on the mask where you don't want the change to affect the image using the Brush tool.

- If you would like to switch the view of your picture with and without adjustments, choose the Toggle Layer Visibility icon in the Properties.

Save adjustment settings

You can always keep the settings of your color adjustments and them to other pictures. Once a configuration has been saved, it can be accessed in the Preset menu in the **Properties panel**. You can also make a choice of the Load Preset option from an adjustment dialog box menu.

- If you would like to save a configuration in the Preset menu, pick the Save Preset choice from the panel menu. This option is only available for Levels, Curves, Exposure, Hue/Saturation, Black and white, Channel Mixer, and Selective Color.
- If you would like to save a configuration in the Shadows/Highlights or Replace Color image adjustment dialog box, choose Save. In the Levels, Curves, Exposure, Hue/Saturation, Black & White, Channel Mixer, or Selective Color image adjustment dialog box, select Save Preset from the panel menu. Insert a name for the configuration, then choose Save.

Once an adjustment setting has been saved, it is stored in the form of a preset and can be applied again.

- Select an adjustment preset from the Preset menu in the Properties panel.
- In an adjustment dialog box, choose Load. Find and load the saved adjustment file. In the Curves, Black & White, Exposure, Hue/Saturation, Selective Color, Levels, or Channel Mixer dialog boxes, save presets in the Preset menu. Select Load Preset from the Preset option in order to load a preset that is not being displayed on the Preset pop-up menu from a diverse location.

Correcting colors in CMYK and RGB

Choose a mode carefully even if you can make all color and tonal alterations in RGB mode and the majority of adjustments in CMYK mode. Avoid switching between modes several times since each time color values are rounded and lost. When creating images for on-screen display, avoid converting RGB images to CMYK mode.

Color adjustments shouldn't be made in RGB mode for CMYK images that are split and printed. Perform the majority of your tone and color corrections in RGB mode if you must convert your image between modes.

Then, you can fine-tune in CMYK mode. The following are the benefits of working in RGB mode:

- RGB has fewer channels. Due to this, your computer will make use of less memory.
- RGB has a much wider range of colors than CMYK, and many more colors are likely to be preserved after adjustments.

You can choose to soft-proof the colors to have a view of an on-screen preview of just how the color of your documents will look when reproduced on a specific output device. The same image can be viewed in CMYK colors in one window while being edited in RGB mode in another.

To open a second window,

- Select Window > Arrange > New Window for (Filename). To enable the CMYK preview in one of the windows, select the Working CMYK option for Proof Setup and then select the Proof Color command.

Using Brushes

You may design brushes that paint pictures in a variety of different ways. You can generate a custom brush tip using a portion of a picture, a pre-existing preset brush, or a brush tip form. To specify how the paint is applied, you make your selections from the Brush Settings panel. With the use of the panel of the brush settings, you can alter existing brushes and design new custom brushes. The Brush Settings panel has brush tip choices that help to determine just how paint is added to a picture. The brush stroke preview at the lower part of the bottom of the panel displays how paint strokes look with the brush options in use.

- Close Window > Brush Settings, or choose a painting, erasing, toning, or focus tool, and choose the panel button on the left side of the options bar.
- Choose an option configured on the left side of the panel.

The options available for the set will be displayed on the right-side panel.

Import brushes and brush packs

You are at liberty to import a variety of brushes into Photoshop. Follow the steps below to get this done;

- In the Brushes panel, navigate to the flyout menu and select Get More Brushes. As an alternative, right-click brushes that are listed in the Brushes panel and choose Get More Brushes from the contextual menu.
- Download a brush pack.
- With Photoshop still running, click twice on the downloaded ABR file. The brushes you have included will now be shown in the Brushes panel.

You may also find and access the downloaded ABR file using the Import Brushes option in the Brushes panel flyout menu. The downloaded brushes are then added to the Brushes panel when you do this.

Create a brush and set painting options

- Choose a painting, erasing, toning, or focus tool. Select Windows > Brush Settings.
- In the Brush Settings panel, choose a brush tip shape, or select Brush Presets to make a choice of a preset that exists.
- Choose Brush Tip Shape on the left side and configure options.
- If you would like to get the brush tip shape attributes locked, choose the unlock symbol and vice-versa.
- To save the brush for later use, select New Brush Preset from the Brush panel menu. You must save your new brush as a component of a collection of brushes in order to save it permanently or share it with other users. From the Brush Presets panel menu, select Save Brushes. Next, save to a new set or replace an existing set. You risk losing your new brush if you replace or reset the brushes in the Brush Presets window without first saving them in a set.

Square Brush

For graphic designers to achieve the striking impression of typical

artwork, digital brushes are tools in graphics software like Adobe Photoshop that imitate traditional brushes and numerous other instruments including pencils, pens, markers, pastels, charcoal, and oils. A selection of fundamental brushes is present in many graphics programs. But if you want, you can add more brushes and create your own. In Photoshop, the square brush has a specific function that employs alternative intent. Your choice to visit this place will depend on a number of things. You may create a distinctive square tool with the aid of the square brush tool, which is quite challenging for a rookie designer to accomplish with any other tool. The most accurate way we can describe this tool to you is that it is used to produce pixel artwork. The little square dots will eventually help you make a big pixel artwork. A square item or various objects should resemble a square object created utilizing this tool, which is frequently employed by numerous designers across the world. Photoshop has a special brush called the square that may be applied to numerous photo-editing tasks. It has a square shape and will let you remove a specific square-shaped portion of the image. It is used to create a variety of forms. Additionally, we regularly use this special kind of tool to add fresh effects to our photos.

Follow the steps below to create a square brush;

- Launch Photoshop and create a new Document. Tap Ctrl + N to make a blank document.
- Navigate to the left toolbar and select the Selection Tool and you will get three more choices. Choose the Rectangular Marquee Tool.
- After you have chosen the tool, choose and move over the blank space on the document and design a square shape.
- Now you are ready to design the chosen part solid black. To design the portion black, tap and hold the Shift button and then tap the Delete button at the same time. The portion will change to black instantly.
- Choose Edit from the menu bar on the top section. Once you have chosen the edit option a drop-down menu will be displayed and from there choose Define Brush Preset.
- Once the above has been completed, a window will display where you can name your custom brush. Click OK once you are done naming.

Activity

1. What is the use of the Magic Wand tool?
2. Mention types of eraser tools.
3. What is the white balance and why is it important?
4. What are color temperatures?
5. How can a polygonal lasso tool be used?

CHAPTER 7

HOW TO WORK WITH BRUSHES

A preset brush is a stored brush tip with specific characteristics, such as shape, dimension, and hardness. You can save preset brushes with the characteristics you commonly use. Additionally, you can store tool presets for the Brush tool using the Tool Preset menu in the options bar.

- Options bar > Convert All to Brush Presets option to convert each of these Brush tool presets to brush presets.

The size, shape, and hardness adjustments made to a preset brush are just temporary. The next time you choose that preset, the brush utilizes its default parameters. To make your changes permanent, you must create a new preset.

Choose a preset brush

- Choose a painting or editing tool, and choose the brush pop-up menu in the options bar.
- Choose a brush. It is worth noting that you are also able to choose a brush from the Brush Settings panel. To see the loaded presets, choose Brushes in the upper-left area of the panel.
- Alter options for the preset brush.
 - **Diameter:** The brush's size will change as a result of this decision. Insert a value or slide the slider. If the brush has two tips, the primary and secondary tips will both be scaled.
 - **Use Sample Size:** Use the Initial diameter of the brush tip if the shape of the brush tip is dependent on a sample.

- **Hardness:** changes the brush tool's anti-aliasing setting momentarily. Although the brush tool is still anti-aliased at 100%, the toughest brush tip will be used to paint. The pencil will consistently render a sharp, non-aliased edge.

The panel containing brushes (Window > Brushes) also allows for the modification of pre-set brush settings. Place the pointer over a brush in the panel containing brushes until the tooltip shows a dynamic preview of brush strokes in the Brush Settings panel. The Brush panel's bottom preview box will show sample brush strokes as you drag the pointer over various brushes.

Manage brushes and brush presets

You can control your brushes in a convenient manner by arranging them in groups in the Brushes panel.

- In the Brushes panel. Choose the brush presets icon.
- Indicate a group name. Choose OK.
- Move brushes and presets into the group.
- Build more groups per your requirements

Rename a preset brush

Get any of the following done;

- Choose a brush in the panel of the Brush presets, select RenameBrush from the panel menu, insert a new name, and choose OK.
- In the Brush panel, click twice on a brush tip, insert a new name, and choose OK.

Delete a preset brush

In the panel for brush presets, get any of the following done;

- Alt-click (Windows) or Option-click (Mac OS) the brush you would like to delete.
- Choose a brush, and pick Delete Brush from the panel menu, or select the Delete icon.

Create a new preset brush

It is possible to save a customized brush as a preset brush that appears in the Preset Manager and Brushes panel. A preference file is where new predefined brushes are saved. The newly added

presets will be lost if the file is damaged, or deleted, or if the brushes are reset to the default library. Keep new preset brushes in a library to save them forever.

- Customize a brush.
- **Get any of the following done in the Brushes panel;**
 - Select New Brush Preset from the panel menu, insert a name for the preset brush, and choose OK.
 - Select the Create New Brush button.

Draw and paint with Mixer Brush

The Mixer Brush imitates actual painting techniques by blending colors on a canvas, mixing colors on a brush, and adjusting how wet a stroke is. The Mixer Brush has a pickup, a reservoir, and two paint wells. The reservoir, which has a larger paint capacity, keeps the final color that is added to the canvas. Only paint from the canvas is put into the pickup well; its contents are constantly blended with canvas colors.

- Choose the Mixer Brush tool. If need be, select and hold the standard Brush tool to show the Mixer Brush.
- If there is a need for you to load paint directly to the reservoir, Alt-click (Windows) or Option-click (Mac OS) the canvas. You can also decide to make a choice of the foreground color.

When you load paint from the canvas, any color change in the sampled region is mirrored in the brush tip. Select Solid Colors to Load If you want brush tips with a constant hue, only select that option from the Current Brush Load pop-up menu in the settings bar.

- Make a choice of a brush from the Brush Presets panel.
- **In the options bar, configure tool choices. For options that are quite common, check out the paint tool options. For choices that are pertinent to the Mixer Brush, take a look at the following;**
 - **Current Brush Load swatch:** From the pop-up panel, select Load Brush to get the brush filled with the reservoir color, or Clean Brush to take off the paint from the brush. To get these tasks done after each stroke, choose the automatic Load or Clean options.

- **Preset pop-up menu:** this choice adds popular combinations of Wet, Load, and Mix configurations.
- **Wet:** helps to manage the amount of paint the brush chooses from the canvas. Higher configurations lead to the production of longer paint streaks.
- **Load:** indicates the amount of paint loaded in the reservoir. At low load rates, paint strokes get dried at a much faster rate.
- **Mix:** helps with the control of the ratio of canvas paint to reservoir paint. At 100%, all paint will be taken from the canvas; at 0%, all paint will then come from the reservoir.
- **Sample All Layers:** this option picks up canvas color from all layers that are visible.

● **Do any of the following;**

- Drag in the picture to paint it.
- To make a straight line, choose a starting point in the picture. Then hold down Shift, and select an ending point.
- When making use of the Brush tool in the form of an airbrush, hold down the mouse button without a need to drag to build up color.

Stroke smoothing

Photoshop intelligently smooths out your brush strokes. Simply enter a value (0-100) for Smoothing in the Settings bar while using one of the subsequent tools: Brush, Pencil, Mixer Brush, or Eraser. A value of 0 represents the legacy smoothing feature in earlier versions of Photoshop. Higher values will intelligently and more thoroughly smooth your strokes.

Stroke smoothing works in various modes. Select the gear icon to enable one or more of the following modes;

● **Pulled String Mode:** this option paints only when the string is taut. Cursor movements within the smoothing radius ensure no mark is left.

● **Stroke Catch-Up:** this choice enables the paint to proceed to catch up with your cursor while the stroke has been paused. Disabling this mode puts an end to the paint application immediately the cursor movement comes to an end.

- **Catch-Up on Stroke End:** finalizes the stroke from the last paint position to the exact point where you set free the control of the mouse.
- **Adjust for Zoom:** By modifying smoothness, his decision aids in the prevention of nervous strokes. When you zoom in on the paper, smoothness is reduced, and when you zoom out, smoothing is increased.

Painting

Adobe Photoshop has a variety of tools for painting and changing the color of images. Like traditional drawing tools, the Brush and Pencil tools apply color in brush strokes. Tools like the Eraser, Blur, and Smudge tools change the colors that are already there in the image. In the options box for each of these painting tools, you may select the color scheme to be used and the preset brush tips to use.

Brush and tool presets

You can choose to keep a set of brush options in the form of a preset so you will be able to swiftly gain access to brush features that you often make use of. Photoshop has various sample brush presets. You can commence with these presets and alter them to give new effects. Most original brush presets can be downloaded on the internet. The Brush Preset selector in the options bar allows you to quickly select presets and temporarily change the size and intensity of a brush preset. When you feel the need to save unique brush tip characteristics combined with settings from the options bar like opacity, flow, and color, save tool presets.

Brush tip options

Options for the brush tip control how colors are applied in addition to the settings in the options bar. With soft edges, broad brushstrokes, and brushes of various shapes, color can be added gradually. To help with the stimulation of painting on canvas or art materials, you can add an appearance with the use of your brushstrokes. Using an airbrush, you can also opt to mimic the spraying motion. To modify the brush tip settings, use the Brush Settings window. With a drawing tablet, you may control how color is applied by adjusting the pressure, angle, rotation, or stylus wheel.

In the Brush Configuration pane and options bar, you can customize settings for drawing tablets.

Paint with the Brush tool or Pencil tool

The current foreground color is painted on an image using the Pencil and Brush tools. Soft color strokes are made by the Brush tool. Hard-edged lines can be drawn with the pencil tool. To make painting easier, keep in mind that the Rotation tool rotates the canvas.

- Make a choice of a foreground color.
- Configure the Brush tool or Pencil tool.
- Make a choice of a brush from the Brushes panel.
- Configure tool choices for mode, opacity, and so on, in the options bar.
- **Get any of the following done;**
 - Choose and move in the image to paint.
 - If you have to create a straight line, choose a starting point in the image. Then hold down Shift, and choose an ending point.
 - When making use of the Brush tool in the form of an airbrush, hold down the button of the mouse without having to drag it to build up color.

Paint tool options

Configure the following in the options bar. Note that the options that are available vary with each of the tools you are making use of;

Mode

This choice helps with the configuring of the method for blending color you paint with the underlying pixels that exist. The modes that are available are usually not constant as they happen to change with the tool being used. Paint modes are quite like layer blending modes.

Opacity

Enables you to control the color's transparency. No matter how many times you move the cursor over a given region when painting, the opacity will not rise over the predetermined level until you let go of the mouse button. Repeated strokes over the area add more

color, corresponding to the set opacity. One hundred percent opacity is opaque.

Flow

Specifies the rate at which color will be added as the pointer passes over an area. As you paint over a region while holding down the mouse button, the amount of color grows based on the flow rate, up to the opacity setting. The color of each area you walk over will change by 33% in the direction of the brush color, for example, if you have the opacity and flow set to 33%. Unless you let go of the mouse button and move the cursor over the area once more, the total opacity won't go more than 33%. Remember that if just one number key is tapped, it configures the opacity of a tool in multiples of 10%. Press two number keys to configure certain opacity. If you would like to configure Flow, tap Shift and number keys.

Airbrush

The brush hardness, opacity, and flow settings govern how quickly and how much the paint is applied. Click the button to switch on or off this option. As you move the pointer over an area, paint builds up while you hold down the mouse button.

Auto erase

(Pencil tool alone) this choice paints the background color over portions that have the foreground color. Choose the foreground color you would like to erase and the background color you would like to change to.

Selection in Photoshop

A selection is a portion of a picture that you pick out. When you make a selection, the region is customizable (you can, for instance, lighten one portion of a picture without doing the same to another). A selection can be created using a selection command or a selection tool. The selection is encircled by a selection border that can be hidden. Pixels inside the selection boundary can be modified, copied, or deleted, but until the selection is deselected, you are unable to interact with any locations outside the selection border.

Adobe Photoshop offers various selection tools for diverse kinds of

selections. For instance, the Elliptical Marquee tool chooses circular and elliptical portions, and the Magic Wand tool can choose a part of colors that look like with just a single click. More complex selections can be made with any of the Lasso tools. You can also choose to smoothen the edges of a selection with the use of feathering and anti-aliasing. It is worth noting that selections are often limited to the active layer. If there is a need for you to make changes to all layers at the same time, you then need to first get the image flattened.

Move, hide, or invert a selection

You can choose to invert a selection so that the previously unselected portion of the image is selected, hide a selection, or move a selection border around a photo. Use the Move tool to shift the selection itself rather than just the selection border.

Move a selection

- Choose the Move tool.
- Drag the pointer inside the selection border, and move the selection to another position. If you have chosen various aspects, all the aspects will move as you drag.

Copy and paste selections

You can copy selections and drag them as you move them between or inside images by using the Move tool, or you can copy selections and drag them by using the Copy, Copy Merged, Cut, and Paste commands. Since the clipboard is not used while dragging a selection with the Move tool, memory is conserved. When transferred between two images with different resolutions, a selection or layer retains its original pixel size. As a result, the pasted region may appear out of proportion to the new image. Employ the Image Size command to correlate the dimensions of the source and destination pictures before copying and pasting. As an alternative, you can resize the transferred data using the Free Transform command.

Based on the configuration of your color management and the color profile linked with the file, you may be prompted to indicate how to control color information in the file.

- **Copy:** this choice copies the chosen area on the layer that is

active.

- **Copy Merged:** this choice makes a merged copy of all the layers that can be seen in the chosen area.
- **Paste:** With this option, you can add a copied selection as a new layer to another area of the same image or to another image altogether. The Paste command overlays the copied selection over the present selection if you already have one selected. Without an active selection, Paste will center the copied selection in the view area.
- **Paste in Place:** If there are pixels on the clipboard that were copied from another Photoshop document, get them placed in a selection into the same location in the target document that they previously held.

Copy a selection

- Choose the area you would like to copy.
- Select Edit > Copy, or Edit > Copy Merged.

Copy a selection while dragging

- Choose the Move tool, or hold down Ctrl (Windows) or Command (Mac OS) to get the Move tool activated.
- Hold down Alt (Windows) or Option (Mac OS), and move the selection you would like to copy and drag. Drag the chosen area from the current image window to the destination image window when copying between images. The entire active layer is copied if nothing is chosen. If you can drop the selection into another image window, the window's boundary is highlighted when you drag the selection over it.

Control the movement of a selection

- If you would like to constrain the direction to multiples of 45 degrees, commence dragging, and then press and hold down Shift as you keep on dragging.
- To drag the selection in 1-pixel increments, make use of an arrow key.
- To drag the selection in 10-pixel increments. Press and hold down Shift, and make use of an arrow key.

Adjust a selection manually

The selection tools let you increase or decrease already-made pixel selections. Prior to manually adjusting the feather and anti-aliasing

levels of a selection, you might want to set them to the same settings as the original selection in the options bar.

Add to a selection or select an additional area

- Make a selection.
- **Make use of any selection tool, get any of the following done;**
 - Choose the Add to Selection option in the options bar, and move to add to the selection.
 - Press and hold down the Shift key, and move to add to the selection.

A plus sign will be displayed close to the pointer when you are adding to a selection.

Subtract from a selection

- Make a selection.
- **Make use of any selection tool, get the following done;**
 - Choose the Subtract from Selection option in the options bar, and move to intersect with other selections.
 - Press and hold down Alt (Windows) or Option (Mac OS), and move to subtract another selection.

A minus sign will be displayed close to the pointer when you are adding to a selection.

Create a selection around a selection border

You can select the width of pixels both inside and out of an existing selection border using the Border command. When you need to choose a border or band of pixels around an image area rather than the region itself, for example, to remove a halo effect around a copied item, this feature can be handy.

- Make use of a selection tool to make a selection.
- Pick Select > Modify > Border.
- Insert a value between 1 and 200 pixels for the border width of the new selection, and choose OK. The new selection centers on the previous selection border and frames the original selected region. A border width of 20 pixels, for instance, creates a new, soft-edged selection that covers 10 pixels within and 10 pixels outside the previous selection boundary.

Expand a selection to include areas with similar colors

Get any of the following done;

- Pick Select > Grow to include all adjacent pixels that fall within the tolerance range indicated in the Magic Wand options.
- Choose Select > Similar to include pixels all through the picture, not just the adjacent ones, falling within the tolerance range.

If you would like to increase the selection in increments, choose either command more than once.

Remove fringe pixels from a selection

Some of the pixels around the selection boundary are transferred with the anti-aliased selection when it is copied or moved. The pasted selection may develop a fringe or halo around its edges as a result.

You can edit undesirable edge pixels with these Layers > Matting commands:

- Color Decontaminate replaces background colors in fringe pixels with the color of fully chosen pixels close by.
- Defringe makes it easier to swap out color-fringe pixels for pixels further from the selection's edge that don't contain the background color.
- When you need to paste a selection that is anti-aliased against a white or black background onto another background, the tools Remove Black Matte and Remove White Matte are both highly helpful. As an illustration, gray pixels can be observed at the edges of black text with anti-aliasing on a white background.

Using the Advanced Blending sliders in the Layer Styles dialog box, you may additionally delete or make transparent fringe portions from the layer. The black or white regions in this scenario would be translucent. You can remove fringe pixels and keep a smooth edge by separating the sliders by pressing Alt or Option (on Windows) or Click (on Mac OS).

How to use colors in the foreground and background

If you've ever wondered what it is about a certain image that makes it seem intriguing and complex, the answer is probably in the layers of the image. These "layers" are most often referred to as the foreground, middle ground, and backdrop, each of which contributes significantly to the particular composition of a photograph. Let's explore what each layer signifies and how to highlight its details for striking outcomes. The elements of the picture that are the closest to you make up the foreground. The furthest element that is away from you is regarded as the background, while the middle ground contributes to the area that is between. Not that it is not every picture that has all of these three elements; most times some only have the foreground and background.

The usage of colors in the background and foreground will be discussed in this section in light of the aforementioned fact. Photoshop uses the foreground color to paint, fill, and stroke selections while using the background color to create gradient fills and restore the areas of an image that have been erased. Some special effects filters also make use of the background and foreground colors. Using the Eyedropper tool, Color panel, Swatches panel, or Adobe Color Picker, you can decide to specify a new background or foreground color. It is important to note that the standard foreground and background colors are black and white, respectively. White is the default foreground color and black is the default background color in an alpha channel.

Choose colors in the toolbox

The current color of the foreground will be displayed in the upper color selection box in the toolbox; the current background color will be displayed in the lower box.

- If there is a need to alter the foreground color, choose the upper selection box in the toolbox, and then select a color in the Adobe Color Picker.
- To later the background color, choose the lower color selection box in the toolbox, and then select a color in the

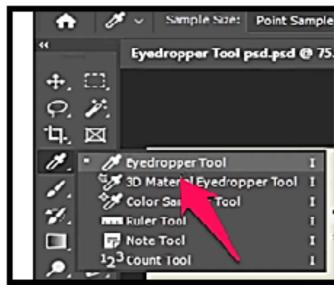
Adobe Color Picker.

- If you would like to reverse the colors of the foreground and background, select the Switch Colors icon in the toolbox.
- If there is also a need for you to bring back the colors of the foreground and background, select the Default colors symbol in the toolbox.

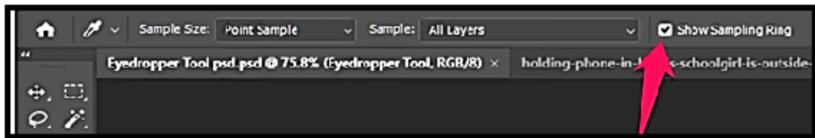
Choose colors with the Eyedropper tool

The Eyedropper tool helps with the sampling of the color in order to designate a new foreground or background color. You can choose to sample from the active picture or from any other place on the screen.

- Choose the Eyedropper tool.



- Change the eyedropper's sample size by choosing a choice from the Sample Size menu in the options bar;
 - Pint Sample: reads the accurate value of the pixel you choose.
- Pick one of the following from the Sample menu:
 - All Layers: this choice helps with the sampling of color from all layers in the document.
 - Current Layer: this choice samples color from the layer that is currently active.
- If you would like to circle the Eyedropper tool with a ring that displays the previewed color at the top of the current foreground color, choose Show Sampling Ring.



- Get any of the following;

- Click anywhere within the image to change the foreground color. Alternately, place the mouse pointer on the image, click, and then drag the mouse anywhere on the screen. As you drag, the foreground color selection box changes dynamically. To choose a new color, let go of the mouse button.
- Alt-click (Windows) or Option-click (Mac OS) in the image to change the backdrop color. Alternately, place the mouse pointer on the image, select the image with the mouse button while holding down the Alt or Options keys, and drag it anywhere on the screen. As you drag, the backdrop color selection box changes dynamically. To choose a new color, let go of the mouse button.

To make use of the Eyedropper tool in a temporary manner, choose a foreground color while making use of any painting tool, hold down Alt (Windows) or Option (Mac OS).

Adobe Color Picker Overview

The HSB, RGB, Lab, and CMYK color models are available for choosing colors in the Adobe Color Picker. Using the Adobe Color Picker, choose the colors for the text, background, and foreground. Target colors can also be selected for different tools, instructions, and options. You can set up the Adobe Color Picker so that you can only select colors from the web-safe palette or from a set of color schemes. To select colors for HDR (high dynamic range) photographs, you can also access an HDR picker. Color components are shown in the HSB color mode, RGB color mode, and Lab color mode in the Color field of the Adobe Color Picker. You can type the desired color's numeric value into the text fields if you know it. Additionally, you can examine potential color choices using the color slider and color field.

You can modify the color by using the color field and color slider;

the numeric values will adjust to reflect the new color. The color panel to the right of the color slider displays the adjusted color in the top portion and the original color in the bottom section. Alerts are shown when a hue is not a web-safe color or if it is outside the printing gamut and hence cannot be printed. The HSB, RGB, Lab, CMYK, and hexadecimal values are all shown at once when you choose a color in the Adobe Color Picker. This helps you see how the many color models define a certain hue. Despite the fact that Photoshop utilizes the Adobe Color Picker by default, you can choose another color picker by setting a preference. You could, for instance, utilize a third-party plug-in color picker or the operating system's built-in color picker on your computer.

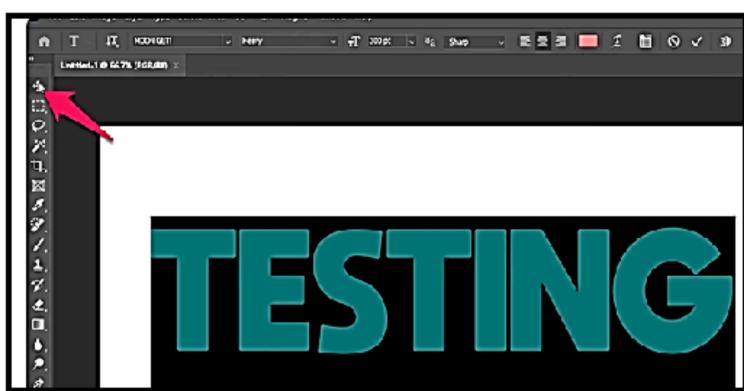
Follow the steps below to show the color picker;

- In the toolbox, choose the foreground or background color selection box.
- Navigate to the Color panel, and choose the Set Foreground Color or Set Background Color Selection box.

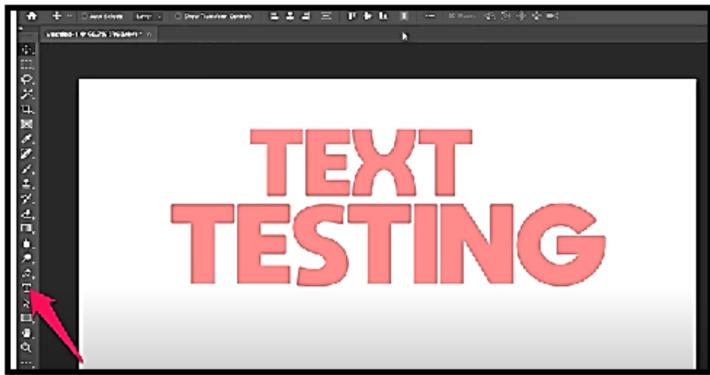
When certain qualities allow you to choose a color, you can also use the Color Picker in certain situations. Consider selecting the color swatch in the tool's settings bar or the eyedropper in a specific color adjustment dialog box.

How to edit text

- If you would like to edit a text in Photoshop, do any of the following;
 - Choose the Move tool and click twice on the type layer on the canvas.



- Choose the Horizontal Type tool or the Vertical Type tool. In the layers panel, select the type layer, or select in the text flow to instantly choose a type layer.
- With any tool chosen, click twice on the type layer thumbnail (T icon) on the Layers panel.



- Place the insertion point in the text, and then do any of the following;
 - Make a click to configure the insertion point.
 - Choose one or more characters you would like to modify.
- Insert your preferred text.
- Get any of the following to add your changes to the type layer;
 - Choose a new tool.
 - Choose a layer in the Layers panel. This action will help to auto-commit changes and also choose the layer.
 - Choose the Commit button in the options bar.
 - Tap the Esc. Key. Take note that the Esc key is configured to commit text by standard. You can alter this to remove the modifications by moving to Edit > Preferences > Type (Windows) or Photoshop > Preferences > Type (Mac OS). Then uncheck the Use Esc key to commit.
 - Pick a spot on the canvas that is distant from the text layer you are editing. Watch as the cursor transforms into a standard pointer arrow, then click.

Take note that if you move the focus to other programs, your

changes will be committed instantly. If you would like to cancel the changes, choose the Cancel button in the options bar or tap the Esc key if you have altered the default configuration of the Esc key function in Preferences > Type > Use Esc key to commit key. The resolution of the document and the zoom level are used by Photoshop to determine the default font size. The font size will be reset to the newly determined default font size when a new document is created or an old document that doesn't have any type layers specified is opened. Also, Auto will be chosen for the lead. Prior to this, the default font size was always 12 pt, and depending on the resolution and zoom level, this could occasionally be too small. The default/legacy functionality will be restored if this option is disabled.

Specify curly or straight quotes

Typographer's quotations, often known as curly or clever quotations, follow the contours of the font. Traditionally, apostrophes and quotation marks are created using typographer's quotations. Traditional acronyms for feet and inches are straight quotations.

- Pick Edit > Preferences > Type (Windows) or Photoshop > Preferences > Type (Mac OS).
- Beneath Type Options, select or deselect Use Smart Quotes.

Apply anti-aliasing to a type layer

Through the partial filling of the edge pixels, anti-aliasing creates a type with smooth edges. Because of this, the type's margins disappear into the background. Remember that anti-aliasing significantly increases the amount of colors in the source image when designing text for web display. This restricts your ability to scale back the image's color palette and, in turn, its file size. Additionally, anti-aliasing could result in stray colors showing up around the edges of the type. Even though anti-aliasing results in jagged edges, it may be desirable to avoid it when file size reduction and color limitation are of the utmost importance. Additionally, think about using bigger text than you would for print. Greater choice in determining whether to use anti-aliasing is provided by larger text, which is also easier to read online.

It is important to keep in mind that anti-aliasing might cause the

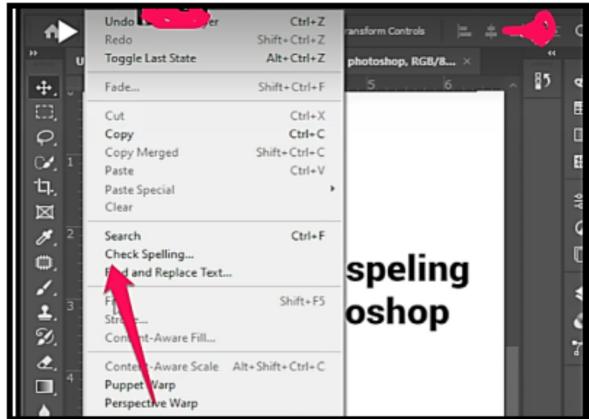
type to seem inconsistent at low resolutions and small sizes. Selecting the Fractional Width option from the Character panel menu will help to lessen this inconsistent behavior.

- Choose the layer in the Layers panel.
- Select an option from the anti-aliasing menu in the options bar or the Character panel. Or you can select Layer > Type, and then choose an option from the submenu.
 - None:** adds no anti-aliasing
 - Sharp:** The type shows as though it is somewhat sharp.
 - Crisp:** The type shows as though it is somewhat sharp.
 - Strong:** The type looks heavier.
 - Smooth:** The type looks smoother.

Check and correct spelling

Any terms that aren't in Photoshop's vocabulary raise issues when you examine a document's spelling. You can determine whether a word is spelled correctly by adding it to your own personal dictionary. You can fix a questionable word's spelling if necessary.

- If needed, in the Character panel, select a language from the pop-up menu at the lower part of the panel. This is the dictionary that Photoshop makes use to check if a spelling is either right or wrong.
- Display or unlock type layers. The Check Spelling command does not check spelling in layers that are hidden or locked.
- Get any of the following done;
 - Choose a type layer.
 - To check a certain text, choose the text.
 - To check a certain word, put the insertion point in the word.
- Select Edit > Check Spelling.



- If you have chosen a type layer and you would like to run a check on the spelling of just that layer, deselect Check All Layers.
- As Photoshop locates words that are not familiar and other possible errors, choose any of the following;
 - Ignore:** this choice will continue the spelling check without making changes to the text.
 - Ignore All:** this choice will ignore the questioned word during the reset of the spelling check.
 - Change:** this helps to correct a misspelling. Ensure that the word that is well spelled is in the Change To Text box and select Change. If the word that is suggested happens not to be the word that you want, choose another word in the Suggestions text box or insert the right word in the Change to text box.
 - Change All:** helps with the correction of all instances of the misspelling in the document. Ensure that the correctly spelled word is in the Change To text box.
 - Add:** This option keeps the words that cannot be recognized in the dictionary so that future occurrences will not be flagged as misspellings.

Find and replace text

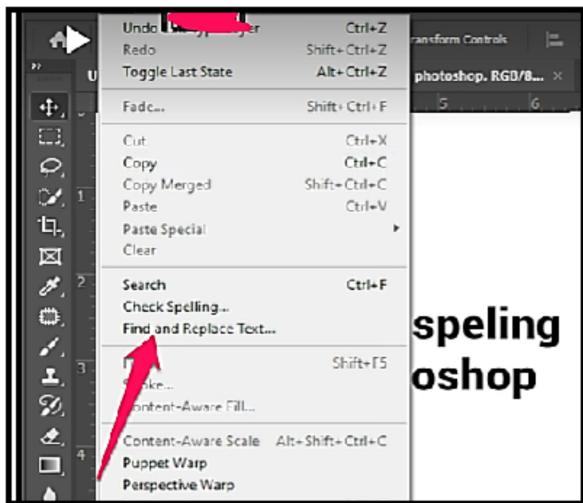
- Do any of the following;
 - Choose the layer that has the text you would like to locate and replace. Put the insertion point at the

beginning of the text you would like to find.

- Choose a non-type layer if you happen to have more than one type layer and you want to find all layers in the document.

In the layers panel, ensure that the type of layers you want to find can be seen and unlocked. The Find and Replace Text command does not check spelling that is hidden or in locked layers.

- Select Edit > Find and Replace Text.



- In the Find what box, type or paste the text you would like to find. If you want to later replace the text, the new text is in the Change To textbox.
- **Choose one or more options to get your search refined.**
 - **Search all layers:** this choice finds all layers in a document. This option can be found when a non-type layer is chosen in the Layers panel.
 - **Forward:** this choice finds forward from an insertion point in the text. Deselect this choice to locate all the text in a layer, irrespective of where the insertion point is located.
 - **Case Sensitive:** looks for a word or group of words that specifically matches the case of the text in the Find What text box. For instance, with the case-sensitive choice used, a search for "PrePress" does not find "Prepress" or

“PREPRESS”.

- **Whole Word Only:** this choice disregards the search text if it is included in a larger word. For instance, if you are looking for “any” as a whole word, “many” will be disregarded.
- Choose Find Next to commence the search.
- **Choose one of the following buttons.**
 - **Change:** this replaces the found text with the revised text. If you would like to repeat the search, choose Find Next.
 - **Change All:** looks for and replaces all occurrences of the found text.
 - **Change/Find:** replaces the text that is found with the revised text, and then looks for the next occurrences.

Assign a language for text

Language dictionaries are used by Photoshop to validate hyphenations. To check spelling, language dictionaries are also employed. There are tens of thousands of terms with typical syllable breaks in every dictionary. You can either apply a language to all the text in a document or only a portion of it.

- **Get one of the following done;**
 - To insert a text with the use of a certain language dictionary, pick the dictionary from the menu that pops up in the lower left corner of the panel of the character and then insert the text.
 - If there is a need for you to alter the dictionary of a text that exists, choose the text and pick the dictionary from the menu that pops up in the lower left corner of the Character panel.
- In the Character panel, select the appropriate dictionary from the pop-up menu in the lower-left corner of the panel.

Please note that if you choose text with more than one language or if the type layer has several languages, the menu that pops up in the Character panel will be dimmed and it will show the word “Multiple”.

Adjust the Scale of Type

In relation to the initial width and height of the characters, you can

indicate the ratio between the type's height and width. Characters that aren't scaled have a value of 100%. True expanded fonts, which have a wider horizontal spread than plain type, are included in some type families. If a condensed or extended font is available, using it is often preferred because scaling distorts the letters.

- Choose the characters or type objects you would like to later. If you do not choose any text, the scale will be added to the new text you create.
- In the Character panel, configure the Vertical Scaling option or the Horizontal Scaling option.

Rotate type

- Do the following:
 - To get to rotate type, choose the type layer and make use of any rotate command or the Free Transform command. For paragraph type, you can also choose the bounding box and make use of a handle to manually rotate the type.
 - To rotate various characters in vertical Asian text, make use of the tate-chu-yoko.

Rotate vertical characters

You can 90° rotate the direction of the characters when dealing with vertical type. Characters that have been rotated appear upright; those that have not appeared sideways (perpendicular to the type line).

- Choose the vertical type you would like to rotate or unrotate.
- Pick Standard Vertical Roman Alignment from the menu of the character panel. A check mark will show that the option is chosen.

Do note that you are unable to rotate double-byte characters. Any form of double-byte characters in the chosen range will not be rotated.

Change the orientation of a type layer

The orientation of a type layer determines the direction of the type lines in relation to the document window when employing point or paragraph type. Whenever a type layer is horizontal, the type flows

from left to right, and when it is vertical, the type flows up and down. Compare the orientation of a type layer to the character direction in a type line.

- Choose the type layer in the panel containing layers.
- **Get any of the following done;**
 - Choose a type tool, and select the Text Orientation button in the options bar.
 - Select Layer > Type > Horizontal, or choose Layer > Type > Vertical.
 - Pick from the Character panel menu, Change Text Orientation.

Rasterize type layers

Type layers do not support all commands and tools, including painting tools and filter effects. Before using the command or the tool, you must rasterize the type. Rasterizing turns the type layer into a regular layer and prevents text editing in its contents. If you select a command or tool that needs a rasterized layer, a warning notice shows. You can rasterize the layer by clicking the OK button that appears next to some warning messages.

- Choose the type layer and select Layer > Rasterize > Type.

How to add or place text

- Launch a photo or Photoshop document.
- Navigate to the toolbar, choose the Type tool, or you can also choose to press T to quickly choose it. The Horizontal Type tool with which you will be able to add text in a horizontal manner will be chosen by default. If you would like to include text in a vertical manner, choose the Type tool once more and choose Vertical Type Tool from the menu containing context.
- Would you like to add a few words like a heading or title? Choose just any aspect on the canvas to get it typed in Photoshop, this is known as point text.

Text for paragraphs is a different sort of text in Photoshop. As the name suggests, this is what you use to type a paragraph. Click and move your cursor to the desired location on the canvas to draw a bounding box where you can input your paragraph. This makes it

simpler to align and change the paragraph afterward. Do note that a type layer will get instant creation when you design a point or paragraph text which can be seen in the Layers panel with the T icon.

- Insert your text. To get your changes saved, choose the right mark in the options bar or you can also choose to tap the Esc key and you are good to go!

How to select text

- Launch the Photoshop document with the text you would like to edit.
- To choose the whole text or paragraph on a type layer, In the toolbar, to select the Move tool and click twice on the text you would like to choose. Remember that if you are unable to get this step done, it only means that you do not have the latest version of Photoshop. In this case, choose the Type tool in the toolbar, pick the text you would like to choose, and then tap Select > All in the menu bar.
- Simply select the Type tool from the toolbar, click and drag the cursor to the top of the characters you wish to select, and then select one or more characters on the type layer.

Draw and edit shapes

With Photoshop comes the ability to draw and alter vector shapes with ease. You can also choose to convert your vector shape to a raster or pixel-based shape.

Create shapes

Follow these steps swiftly to create shapes in Photoshop;

- **Choose a shape tool:** Choose and hold the Shape tool group icon in the toolbar to display a variety of shape tool options, including the rectangle, ellipse, triangle, polygon, line, and bespoke shape. Select the appropriate tool for the form you want to draw.



- **Configure shape tool options:** in the shape tool options bar, you can do any of the following;

- **Mode:** configure a mode for your Shape tool; Shape, path, and pixels.
- **Fill:** pick a color to get your shape filled.
- **Stroke:** make a choice of the color, width, and type of your shape stroke.
- **W & H:** manually configure the width and height of your shape.
- **Path operations:** make use of path operations to configure the way your shapes interact with one another.
- **Path alignment:** make use of path alignment for aligning and distributing your shape documents.
- **Path arrangement:** make use of path arrangement to configure the stacking order of shapes you design.
- **Additional shape and path options:** Select the gear icon to gain access to more shape and path choices to configure attributes like the breadth and hue of the on-screen display or your path and constraint options while creating the form. .

- **Draw a shape:** make a click and move on the canvas with your chosen shape tool to draw a shape. This instantly creates a new shape layer in the panel containing layers.

- Tap and hold the shift key while drawing to ensure your shapes are proportional.
- With your shape layer chosen, make use of the Move tool to drag your shape around and alter its position on the canvas.
- To scale with ease, transform, or rotate your shape, pick Edit > Free Transform or tap Control + T (Windows)/ Command + T (Mac).

- **Edit shape properties**

- Using controls on the canvas or the Shape Properties section of the Properties panel, you may quickly alter your shape's properties. Your interaction with shapes is more natural thanks to on-canvas controls.
- To change the shape's look, utilize the on-canvas morph and rounding controls. The keyboard modifiers will work the same way for on-canvas transform controls as they do for Photoshop's Transform tool. You can move while retaining the Alt (Windows) or Option (Mac) key to change the radius of just one corner, or you can change the radius of all the corners of your object at once. A triangle's corners will all shift if you move one of them. Utilize the on-canvas rotate handle that displays as you hover over a shape on the canvas to quickly rotate it.

Draw a custom shape

You are able to draw custom shapes with the use of shapes from the Custom Shape pop-up panel or save a shape or path to use as a custom shape.

- Choose the Custom Shape tool from the shape tools in the toolbar.
- Select the gear icon to the right of the Custom Shape picker in the shape tool options bar to get a list of all the custom shapes included with Photoshop. A list of all shapes that are available will then appear. Choose your favorite bespoke shape.
- If you are unable to locate your preferred shape, choose the gear icon in the Custom Shape picker panel and choose the Import Shapes option to bring in your preferred shape from your saved files. You can also choose to design and store a bespoke shape in your library.
- You may easily change the Custom Shape tool's properties from the Shape Properties section of the Properties panel. Additionally, you have the option to modify a custom shape while maintaining its shape parameters by using on-canvas Transform controls.
- Select and move anywhere in the canvas to draw your custom shape.

Save a shape or path as a custom shape

- In the Paths panel, choose a path; either a vector mask for a shape layer, a work path, or a saved path.
- Select Edit > Define Custom Shape, and insert a name for the fresh bespoke shape in the dialog box the Shape Name. The new shape will be displayed in a panel pop-up for shapes in the options bar.
- To save the new custom shape as part of a new library, choose from the popup panel menu Save Shapes.

Accessing Legacy Custom Shapes

The steps listed below can help you add Legacy Custom Shapes from earlier versions of Photoshop to your current installation.

- From the main window, choose Windows > Shapes.
- In the top right corner of the panel containing shapes, choose the menu symbol and choose Legacy Shapes and More.

How to add texture to a photo

Everything has its own texture, and you can just notice something about how something feels. A kitten's silky, fluffy fur or a tree's rough, aged bark can be recognized without being touched. In an image, texture can highlight distinctive patterns, offer visual appeal, or even arouse feelings. Numerous photographic genres share ground with texture photography, from traditional portraiture to high art.

In macro photography, texture is crucial as well. You can gain a new perspective on an image by using a macro lens to enlarge its details. The texture is a crucial compositional feature that adds interest to your photographs and grabs the viewer's attention, whether you're looking at something up close to see tiny details or far away to see it in the abstract. Your vector drawings and web designs can benefit greatly from the use of textures to create visual flair. Break up your basic colors with interesting overlays, whether they are made of a wood texture or a watercolor texture. There are several Photoshop textures that may help you create any look you want to employ, whether it's a subtle shining metal texture or a startling halftone effect.

Photoshop textures are impacts that you can add to a picture for a

photograph or graphic design job. Opacity settings are used to manage how photos are layered on top of one another, while blend modes are used to create special effects. This can give a logo design a gritty concrete feel or an antique paper vibe to a family photo. Regardless of your objective, Photoshop textures can assist you in adding a new degree of complexity to your project.

The steps below will instruct you on how to add texture to an image;

- Launch Photoshop and bring in the picture you would like to add texture to.
- Add your texture by choosing File > Place, then move to where your texture image is kept.
- In the Layers panel, position your texture image at the top of your background image.
- Ensure that you choose the top layer.
- At the top left of the panel containing layers, modify the blend mode in the dropdown menu from Normal to Overlay.
- Try out different blend modes and attempt altering the slider of Opacity to modify the look of the texture of the picture.
- Save your project as a PSD file, or you can also choose to export the image as either a PNG or JPEG so you can share it online with ease.

Activity

1. What is the function of brushes?
2. How can colors be used in the foreground and background?
3. Build a shape in Photoshop.
4. Make use of text in Photoshop.

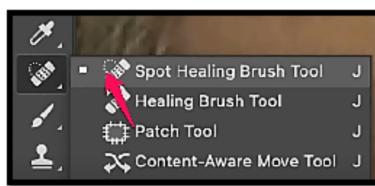
CHAPTER 8

USING THE SPOT HEALING TOOL

The Photoshop tool referred to as Spot Healing tool is one that removes undesirable blemishes, marks, or tiny items from your image in a wonderful way. For smooth blending, Photoshop chooses and substitutes pixels from another area of your image. There are many tools in Photoshop for repairing defects. The Spot Healing Brush is excellent for removing dirt, debris, and imperfections. To achieve the best results, make sure that your brush is a little bit bigger than the area that has to be removed. This will allow Photoshop to fill in the area by copying a portion of the surrounding image. You can modify the brush size and hardness in the settings bar. The spot can be removed with a stronger brush without obliterating the margins.

It works similarly to the Healing Brush in that it paints on the screen using samples of pixels from an image or pattern, fitting the texture, lighting, transparency, and coloring of the sampled pixels to the pixels that require being mended. The Spot Healing Brush automatically samples from the region that is around the area that was modified, unlike the Healing Brush, which requires you to choose a sample spot. It is worth noting that if you would like to have a large area retouched or if there is a need for more control over the source sampling, you can employ the use of the Healing Brush as against the Spot Healing Brush.

- Choose the Spot Healing Brush tool from the toolbox. If need be, choose the Healing Brush tool, Patch tool, or Red Eye tool to display the concealed tools and make your preferred selection.



- Make a choice of a brush size in the options bar. A brush that is a little bigger than the aspect you would like to fix is best

used so that you will be able to cover the whole area with just one click.

- Pick blending mode from the Mode menu in the options bar. Choose Replace to ensure you keep noise, film grain, and texture at the edges of the brush strokes when making use of a soft-edge brush.
- **Select a Type option in the options bar:**
 - **Proximity Match:** Make use of pixels around the edge of the selection to locate an area that can be used as a patch.
 - **Create Texture:** make use of pixels in the selection to design a texture. If the texture does not work, attempt moving through the area one more time.
 - **Content-Aware:** this choice helps to compare image content that is close by such that it fills the selection with ease, realistically keeping important details like shadows and object edges.
- Choose Sample All Layers in the options bar to get data sampled from all layers that can be seeded. Deselect Sample All Layers to ensure that data is sampled just from the layers that can be seen.
- Choose the area you would like to fix, or choose and move to smooth over imperfections in a much larger area.

Healing Brush tool

Employ the Healing Brush tool to smooth out defects and merge them into the image's backdrop. Fill with pixel sampling from an image or pattern with the Healing Brush tool, much as you would with cloning tools.

However, this program also matches the sampled pixels' texture, lighting, transparency, and shading to the damaged pixels. The outcome is that the corrected pixels match the rest of the image perfectly. Note that the healing brush tool can be added to videos or frames of animation.

- Choose the Healing Brush tool.



- Choose the brush sample in the options bar and configure brush options in the panel that pops up:
 - **Mode:** indicates the blending mode. Choose Replace in order to keep noise, film grain, and texture at the edges of the brush stroke when making use of a brush with a soft edge.
 - **Source:** indicates the source to use for getting the pixels fixed. Sampled to make use of pixels from the image in use or Pattern to make use of pixels from a pattern. If you decide to choose Pattern, choose a pattern from the pop-up panel that contains Pattern.
 - **Aligned:** this choice helps to sample pixels in a continuous manner without having to lose the current sampling point even if you let go of the button of the mouse. Deselect Aligned to proceed to make use of the sampled pixels from the original sampling area each time you stop and commence painting.
 - **Sample:** Samples of data from the layers you specify. Choose Current and below to sample from the presently active layer as well as any visible levels underneath it. Select the Current Layer to sample only the active layer. For samples from all currently visible layers, select All Layers. To sample from any obvious layers other than adjustment layers, click the Ignore Adjustment Layers button to the right of the Sample pop-up choice.
 - **Diffusion:** this choice helps to swiftly control how quickly the pasted area gets to adapt to the image that surrounds you. Choose a lower value for pictures with grain or fine details or a much higher value for smooth pictures.
- Configure the sampling area by placing the pointer over a portion of the picture and Alt-clicking (Windows) or Option-clicking (Mac OS). If you are sampling from a picture and adding to another, the two images must be in the same color

mode except if one of the pictures is in Grayscale mode.

- In the Clone Source panel, choose a clone source button and configure an additional sampling point. You can configure about five different sampling sources. The panel of the Clone Source will remember the sources you have sampled until the document you are modifying is closed.
- **Do one of the following in the panel of the Clone Source;**
 - To either scale or rotate the source that you are cloning, insert a value for W (Width), H (Height), or the rotation in degrees. You can also choose to display an overlay of the source that is being cloned, choose Show Overlay, and indicate the various overlay options.
- Move in the image; the pixels that have been sampled will be melded with the pixels that exist each time you let go of the mouse button.

Attempt a selection prior to making use of the Healing Brush tool if the edges of the portion you wish to heal have a sharp contrast. The selection should perfectly follow the boundaries of contrasting pixels and be larger than the area you want to heal. The selection stops colors from leaking from the edges when you paint with the Healing Brush tool.

Retouch with Remove tool

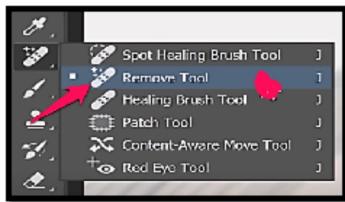
One of the fundamental processes in picture alteration that gives your image personality and appeal is image retouching. You can eliminate or correct flaws in your photographs using retouching techniques. The remove tool employs sophisticated technologies to automatically fill in the backdrop and eliminate undesired things when a user brushes over them while maintaining the integrity of objects and depth in intricate and varied backgrounds.

When deleting larger objects while maintaining object bounds, this capability is quite effective. For instance, the program can delete a complete structure or vehicle from a picture of a mountainous environment while preserving the accuracy of the mountainous scenery.

If you would like to replace unwanted portions in your image with the use of the Remove tool, get the following done;

- Choose Remove tool from the group. Note that when making

use of the tool for the first, a dialog about required components installing instantly will pop up.



- Make use of the Size field in the options bar to pick your brush size. The brush size ought to be slightly larger than the area you want to fix if there is a need for you to cover all of the whole area with just a single stroke.
- Choose the Pressure for Size button in order to enable the use of a pressure stylus to alter the size of the brush.
- Switch on Sample All Layers in the options bar to ensure the sampling of data from all visible layers. Note however that for a non-destructive workflow, you can build and choose a new layer before activating Sample All Layers. The currently chosen layer will get the newly produced pixels.
- Switch off Remove after each stroke to enable various strokes of the brush prior to adding the fill. Make use of more than one stroke for large areas or areas that are quite complicated. Keep Remove after each stroke to add the fill as soon as you get a single stroke completed.
- Move the brush over any part you would like to remove. If Remove after each stroke is switched off, there will be a need for you to tap Apply in the options bar to get the magic effected.

If you experience any problems with the Remove tool, choose More Stable under Preferences > Image Processing > Remove Tool Processing to improve stability.

Recommended/Minimum hardware environment for Remove tool

Windows

Minimum hardware requirements	
CPU	8 cores (Intel Rocket Lake CPU or a

	model that is equivalent)
GPU	Discrete GPU card, like Nvidia RTX 3060 or higher, with at least about 8 GB RAM
Memory	16 GB
SSD Storage	512 GB
Mac OS	Minimum hardware requirements
CPU	8 cores
GPU	Mid-level discrete GPU card with at least 8 GB of RAM
Memory	16 GB
SSD Storage	512 GB
OS version	126.3
Processor	M1 Pro ARM or equivalent

Known issues with the Remove tool and their workarounds

Some components for the Remove tool must be downloaded from Adobe servers. Following the installation of Photoshop in the Creative Cloud Desktop, these components are automatically installed. When finished, click the three dots next to Photoshop's Open button, choose Add-ons, and you'll notice Added checked for Remove tool components. Photoshop can be opened after or even before the installation process is finished. The following problems could arise when you choose the Remove tool.

New interactions in Remove tool

Instead of completely brushing over an area you want to eliminate, use the remove tool to create a loop around it. Furthermore, Photoshop will calculate the distance needed to automatically join the loop and fill it in; you don't even need to close the loop. Large regions can now be removed more quickly and easily by picking them rather than the entire area with a brush. As a result, there is less chance of producing less-than-ideal outcomes when brushing a broad region to be eliminated and missing a pixel.

Follow these steps to brush a closed loop around the element you would like to make disappear;

- Brush the perimeter of the portion you would like to remove. There is no need for the endpoints to be fully connected. Any content beneath the brush and within the loop will be taken off. This interaction will help to refine the area depending on object detection.
- If multi-stroke is enabled, move the mouse/pen up or select the apply (checkmark) icon in the options box. This interaction can be used with or without the Remove after each stroke is checked.

If you make a selection by mistake while getting the object encircled, you can alter the brush stroke mode from addition to subtraction to make a correction.

Take the following steps for you to have an idea of how to make use of the addition (+) and subtraction (-) modes;

- Uncheck the Remove after each stroke option in the Tool Options Bar so you are sure you are in multiple stroke modes.
- Make a brush stroke in order to get to know a part for removal.
- Choose the subtraction mode (-) button in the options bar for tools in order to later the tool mode.
- Brush once more on the picture to remove certain parts from the part that is highlighted.
- Proceed to switch between the (+) and (-) modes as needed and brush to get the area to be taken off refined.
- Tap the apply checkmark once you are through refining or the Enter key to make initiation of the removal of all items in the area that is highlighted.

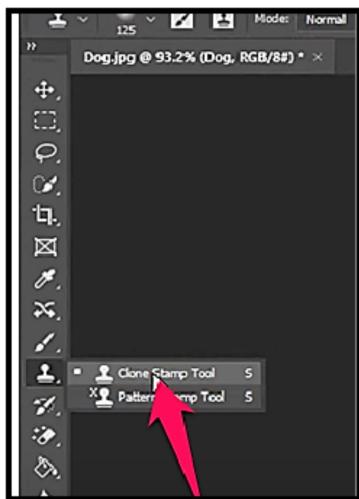
How to use the Clone Stamp tool

There are options for the Clone Stamp tools or Healing Brush tools in the Clone Source panel (Window > Clone Source). Up to five distinct sample sources can be set up, and you can rapidly choose the one you need without resampling each time. To make it simpler to clone the code in a particular spot, you can display an overlay of your sample source. To more accurately match the size and orientation of the cloning destination, you can additionally rotate or

scale the sample source. The Clone Source panel additionally offers options for defining the frame connection between the sample source video/animation frame and the target video/animation frame for timeline-based animations.

The Clone Stamp tool allows users to paint one portion of an image over another portion of the same picture, or over a portion of any open document with the same color mode. Additionally, you can paint a portion of one layer over another. Use this tool to duplicate objects or fix an image issue. The Clone Stamp tool can also be used to paint images onto video or animation frames. The Clone Stamp tool gives you fine control over the size of the clone area and allows you to use any brush tip. Additionally, you can manage how much paint is applied to the copied region by adjusting the opacity and flow parameters.

- Choose the Clone Stamp tool.



- Select a brush tip and configure brush options for the blending mode, opacity, and flow in the options bar.
- Set up any of the following options bars if necessary to specify how you want the sampled pixels to be aligned and how to sample information from the layers of your document:
 - **Aligned:** constantly samples pixels without losing the current sampling location, even after releasing the mouse button. When you stop and start painting,

deselect Aligned to keep using the pixels that were sampled at the original sampling point.

- **Samples:** this option takes data samples from the layers you choose. Select Current and beneath to sample from the currently active layer and any visible layers below it. Select Current Layer if you just want to sample from the active layer. Select All Layers if you wish to sample every layer that is visible. Select All Layers and then select the icon for Ignoring Adjustment Layers on the right side of the Sample pop-up menu to sample all visible layers except adjustment layers.
- Configure the sampling point by placing the pointer in any image that is opened and then Alt-click (Windows) or Option-click (macOS). Be sure that you are not working on an adjustment layer. The Clone Stamp tool does not work on adjustment layers.
- In the panel of the Clone Source, choose a clone source button and configure an additional sampling point. You can choose to configure five different sources of sampling. The Clone panel helps in saving the sources that have been sampled until the document is closed.

Set sample sources for cloning and healing

Using the Clone Stamp or Healing Brush tools in Photoshop, take examples from the current document or any other open document. You can specify sampling locations in the present frame that you're painting or sample sources in a separate frame while you're cloning video or animation, even if the frame is on an entirely distinct video layer or in a different open document. In the Clone Source panel, you can set up to five distinct sample sources simultaneously. The sampling sources are saved in this panel until the document is closed.

- If you would like to clone video or frames for animation, launch the Animation panel. If you are not cloning video or frames for animation, skip to the second step. Choose the timeline animation option and drag the current-time indicator to the frame with the source you would like to sample.
- To configure the sampling point, choose the Clone Stamp tool and Alt-click (Windows) or Option-Click (macOS) in any

document window that is opened.

- If you would like to get another sampling point configured, choose a different Clone Source button in the Clone Source panel. You can alter the sampling source for a Clone Source button by configuring another sampling point.

Specify the Clone Source Offset

You can paint with the sampled source anywhere in the target image when using the Clone Stamp tool or Healing Brush tool. You can see where you wish to paint with the help of the overlay options. However, you can define the x and y pixel offset if you paint at a precise area in relation to the sample point. Input the x and y pixel values for the Offset option after choosing the source that you would like to use in the Clone Source window.

Exporting in Photoshop

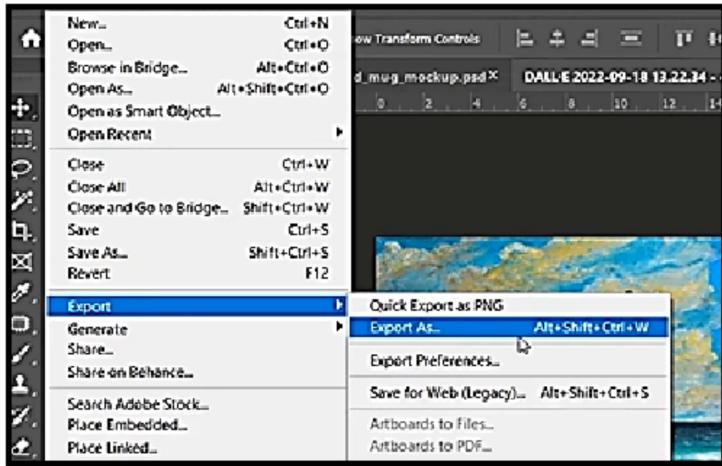
You can transfer a Photoshop file, artboards, layers, and layer groups in PNG, JPG, or GIF file formats by using the Quick Export As and Export As options. It's important to note that using the Export As option to export Photoshop files as SVG is no longer supported as of the August 2021 release of Photoshop 22.5. Because of its restrictions and minimal usage, Export as SVG is now being deprecated.

Quick Export As

If you would like to make use of the Quick Export As choice when there is a need for you to swiftly export your work depending on the configurations you have indicated in the Quick Export preferences.

To gain access to the Quick Export As a choice, get either of the following done;

- Locate File > Export > Quick Export As (image format).



- Navigate to the panel containing layers. Choose the layer groups, layers, or artboards you would like to export. Right-click your choice and select Quick Export As (image format) from the context menu.

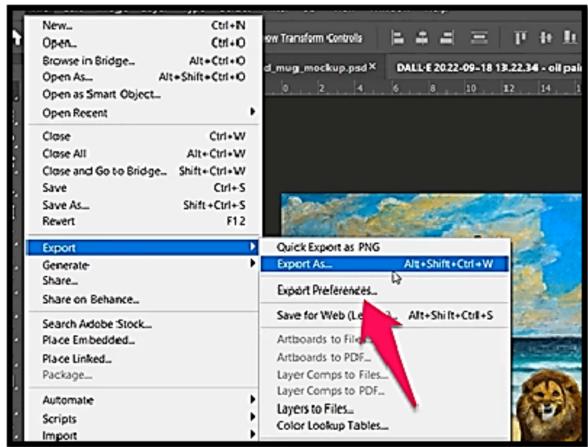
Quick Export preferences

Quick Export preferences for the format, location, metadata, and color space

By default, Quick Export produces assets in the form of PNG with transparency and a prompt every time to choose a location for export.

If you would like to later the Quick Export configurations, do one of the following;

- Locate Edit > Preferences > Export.
- Choose File > Export > Export Preferences.



Remember that you can always indicate the following choices in the dialog box for preferences;

Quick Export Format: PNG, JPG, or GIF are the available image file formats that you can export images in. Format-specific parameters can also be set. You can specify whether you want to export assets with transparency enabled (32-bit) for PNG, for example, or export files that are substantially smaller (8-bit). You can select to adjust the export Quality for JPG.

Quick Export Location: Make a choice of this option to choose the location for pictures exported with the use of Quick Export. Configure any of the following;

- **Ask where to export each time:** this choice prompts you to choose your preferred location each time you have a need to export assets.
- **Export files to an assets folder next to the current document:** this choice positions the image asset in a subfolder with the name Asset within the folder that has the source Photoshop document.

Quick Export Metadata: make use of this choice in adding metadata-copyright and Contact Info in the assets that are being exported.

Quick Export Color Space: choose if you want to convert the assets to the sRGB color space.

Export As

Use the Export As option each time you want to export layers, layer

groups, artboards, or Photoshop projects as photos to fine-tune your export settings. The selected artboard, layer, or layer group is exported as a separate image asset.

To open the dialog box for Export As, do one of the following;

- Locate File > Export > Export As to have the current Photoshop document exported. If your document has artboards, all of the artboards that are in it will also be exported via this dialog.
- Navigate to the Layers panel, and choose layers, layers groups, or artboards you would like to have exported. Right-click your choices and choose Export As from the context menu.

With the release of Photoshop 23.3 in April 2022, UXP (Unified Extensibility Platform) will feature the Export As dialog in place of the Common Extensibility Platform (CEP). Compared to CEP, UXP supports more modern features and is simpler to create.

Export As dialog configurations

You can choose to configure the following choices in the Export As dialog;

Format: select PNG, JPG, or GIF.

Format-specific setting: For PNG, indicate if you would like to export assets that have Transparency enabled (32-bit) or one with a much smaller picture (8-bit). For JPEG, **indicate your preferred image quality slider (1-7).** GIF pictures are usually transparent by default. While having to export PNG assets, take the following into consideration;

- Choosing Transparency produces 32-bit PNG assets.
- Choosing a Smaller File produces 8-bit PNG assets.
- When the above is not chosen it produces 24-bit PNG assets.

Size: Gives the photo asset's width and height. Height and width are by default locked together. Instantaneously changing the width proportionally changes the height as well. Check out the dimension of the Canvas if you want to specify the exported asset's canvas bounds.

Scale: Make a decision regarding the exported image's size. This option is quite helpful for exporting assets with higher- and lower-resolution. The dimension of the image changes when the scale is

altered.

Resample: Select a resampling technique. Resampling is the process of altering the quantity of image data as you modify an image's pixel size or resolution, usually while resizing it.

- **Bilinear:** this choice helps with the addition of pixels by averaging the color values of the surrounding pixels. This choice brings about medium-quality results.
- **Bicubic:** Depending on an analysis of the values of nearby pixels, this decision is much slower yet quite exact. Bicubic, which employs intricate calculations, provides smoother tonal gradations than Bilinear or Nearest Neighbor resampling.
- **Bicubic Smoother:** this choice is quite good for expanding pictures depending on Bicubic interpolation but it is also created to offer much smoother results.
- **Bicubic Sharper:** Good for shrinking the size of a bicubic-interpolation image while preserving sharpness. The detail in a resampled picture is preserved with this technique. Try using Bicubic if Bicubic Sharper oversharpens any portions of a picture.
- **Nearest Neighbor:** this choice is quite fast but it is less accurate and it replicates the pixels that are in the picture. This method is used with illustrations that have edges that are not anti-aliased. It also keeps hard edges and offers a much smaller file. Nevertheless, this option can generate effects that are jagged, which will then be glaring when you scale a picture or do various alterations to a specific selection.
- **Preserve Details:** while modifying the size of the picture, this option puts primary importance on the preservation of image details and its sharpness.

Canvas Size: If your asset has a need to fill a specific width and height, indicate the values as the size of the canvas. The dialog for Export As will then update the preview to have **the image centered within those bounds. This choice is quite useful in various scenarios like the following:**

- You are exporting symbols that have diverse sizes, but also have a need to be centered within 50x50 px boxes.
- You are exporting banner pictures that are smaller or larger than the needed dimensions.

If the image is greater than the canvas size, it will be cropped to the

dimensions that are specified for the canvas. If the dimension of the canvas is larger than the image, the new space will be filled using the information in your image. If there is a backdrop layer, it will be filled with white. If the file does not have a background layer and your design options permit it, the background layer will be transparent. If your file is in the Index color mode, the final color swatch from the color table will fill it. Click Reset to reset the values to the ones you selected for Image Size.

Export as Location Preference

If you would like to alter the location preference for Export As, do one of the following;

- Locate Edit > Preferences > Export.
- Choose File > Export > Export Preferences.

In the dialog for preferences, choose your preferred choice beneath Export As Location.

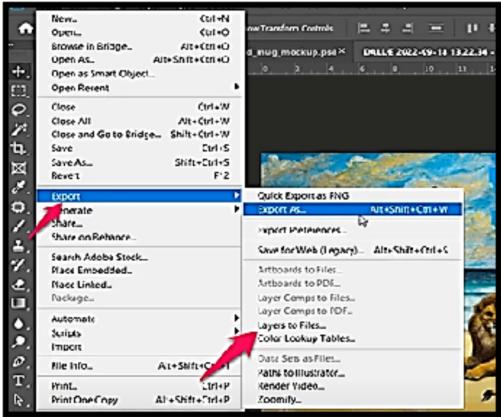
- Export assets to the location of the current document.
- Export assets to the last location indicated.

Export layers as files

Layers can be exported and saved as separate files in a number of different file types, including PSD, BMP, JPEG, PDF, Targa, and TIFF. As they are stored, layers are automatically given names. Options to regulate name generation can be set.

If you would like to export layers as files, get the following done;

- Locate to File > Export > Export Layers To Files.



- In the dialog box of Export Layers To Files, beneath Destination, choose Browse to make a choice of your preferred destination for the exported files. By default, the files that are produced are saved in the sample folder as the source file.
- Insert a name in the text box of File Name Prefix in order to indicate a common name for the files.
- Choose the option for the Visible Layers Only if there is a need for you to export just those layers whose visibility is enabled in the panel containing Layers. Make use of these choices if you would not like all the layers to be exported. Switch off visibility for layers that you wouldn't like to be exported.
- Pick a file format from the menu for File Type. Configure options as necessary.
- Choose the option of Include ICC Profile if you would like the working space profile to be inserted in the exported file. This is quite important for workflows that are color-managed.
- Choose Run.

Export artboards as files

You can export artboards as different files. Follow the steps below;

- In Photoshop, choose File > Export > Artboards To Files.
- In the dialog box for Artboards To Files, do the following;
 - Choose the preferred destination where you would like to keep the generated files.

- Indicate a file name prefix.
- Indicate if you would like to export artboard content alone or if you would like to add the areas that are overlapping.
- Indicate if you would like to export all artboards or if it is just the ones that are chosen at the moment.
- Indicate if you would also like to export artboard backgrounds along with the artboards.
- Pick the export choices for the file type you have chosen.**
 - Indicate whether you want the titles of the artboards to be exported along with the artboards themselves. During the configuration process, you can also select a custom font, font dimension, font color, and canvas expansion color.

- Choose Run. Photoshop will then export the artboards as files in the chosen format.

Export artboards as PDFs

You can get artboards exported as PDF documents. Follow the steps below;

- In Photoshop choose File > Export > Artboard To PDF.
- **In the dialog for Artboards To PDF, do the following;**
 - Make a choice of the destination/location where you would like to keep the PDF documents produced.
 - Indicate the prefix of the name of the file for the PDF document produced.
 - Indicate if you would like to export just content on the artboards or also the content in the places overlapping the artboards.
 - Indicate if you would like to export all artboards or just the ones chosen at the moment.
 - Choose whether you want to create a single PDF document for all the artboards in the present work or a separate PDF document for each artboard. The file name prefix you previously suggested will also be used for all of the PDF documents you choose to create.
 - Indicate an encoding for the PDF documents exported; ZIP or JPEG. If you did choose JPEG, ensure you also indicate a Quality setting (0- 12).

- Indicate whether you want the exported PDF documents to have the International Color Consortium (ICC) Profile. An ICC profile contains data that includes a color input or output device.
- Indicate if you would also like to export the names of the artboard along with the artboards that have been exported. You can indicate a custom font, font size, font color, and canvas extension while choosing this configuration.
- Choose Run. The PDF document will then be generated by Photoshop.

How to create a shared album and invite people to contribute (Lightroom Bonus)

With Adobe Photoshop Lightroom, sharing photographs from your computer, smartphone, or other mobile devices is simple. Image editing and adjusting, sharing shared albums for viewing and collaboration, and posting on your preferred social network are all options. You can use any device to access your cloud storage library and then upload particular pictures or collections of pictures to social networking platforms or picture-sharing websites like Google Photos or Flickr. From a desktop computer or the Lightroom mobile app, edit and share. You might even give friends a shared album so you can edit photos together before sharing them online. Make sure you are working with high-quality image files by saving and sharing in the optimum photo format for your project, which might range from JPG to TIFF.

With a variety of sharing options, post fresh photos wherever you wish. For instance, Google users can submit photographs directly to the Google Photographs app, and Amazon Prime members can post photos directly to Amazon Photos. Remix your images and get inspired by the various modifications of your work then see inside other photographers' editing workflows in your Discover feed. You can also easily move Lightroom images within Adobe Creative Cloud. Additionally, you can view your photo library from anywhere at any time thanks to abundant cloud storage space.

- Launch the image, photoset, or album you would like to upload.
- Choose the Share icon to gain access to the size and

destination options for sharing your work.

- Make a choice of the proper picture size for your chosen image or images (there can also be more than one).
- Once done, you can then choose to share a link, get others invited to edit, or share your pictures.

Activity

1. What is the use of the spot healing brush tool?
2. Make use of the clone stamp tool.
3. Export images from Photoshop.

CHAPTER 9

TROUBLESHOOTING ISSUES

In this section, you will learn about all of the basic troubleshooting steps that should help solve most of the problems you may encounter while making use of Photoshop.

Known issues in Photoshop

Check well to be sure that the issue you are experiencing is a known issue in the latest release of Photoshop. Some of these issues include; text errors, macOS compatibility, scratch disk full errors, program errors, crashes on working with tools, unavailable tools and options, cursor shuttering errors, new document eros, neural filter errors, etc.

Install application updates

By just making sure your Adobe software is current and up to date, you may solve a myriad of issues.

Install operating system updates

By making sure that your computer's OS is current, you can fix a lot of issues. To ensure that fresh operating systems are compatible with the computer's components and drivers you are using, Adobe advises getting your own testing done on a non-production partition.

Install graphics card (GPU) driver updates

A faulty, unsupported, or mismatched graphics driver may be the root of your performance problems, crashes, or problems with image rendering.

Troubleshoot graphics processor

The most recent driver may not always solve all issues with video adapters and drivers. Disabling the Use Graphics Processor setting is the quickest and simplest way to figure out if the issue is with your video adapter or driver.

Troubleshoot plug-ins

A lot of problems can arise from making use of incompatible, outdated, or incorrectly installed plug-ins.

Restore preferences

Reverting the preferences of Photoshop to their factory-fresh state can help with solving many issues which include program errors, strange tool/interface behavior, etc.).

Troubleshoot fonts

Using third-party fonts can lead to a variety of issues, such as crashes or hangs while using the Type tool or turning on/off the Character panel. General performance problems can also be brought on by poor fonts or fonts when starting or using Photoshop. To increase stability and the effectiveness of text tools, validate and get rid of redundant or problematic fonts.

Photoshop is crashing

If you get to perform all of the above listed steps and you are still encountering crashes, ensure you submit all your crash reports. If you get to submit them for a known issue to Adobe with the use of your email address, you can expect to get an email from them for a solution to help you fix the problem.

Missing tools

Try returning the Toolbar customization to default if one or more tools are missing from the Toolbar. To accomplish this, choose Edit > Toolbar and then, in the right-hand column, click Restore Defaults. You may also utilize Photoshop's Discover box to search for and find tools. By pressing the keyboard shortcut Command/Control + F, you can access the search dialog box. You can search for a tool by name and then select the appropriate result by clicking. In Photoshop, the instrument will be marked and activated.

Start in safe mode

There are times when third-party extensions and other utilities can cause interference with the operation of Photoshop. If you launch your computer in safe mode, third-party extensions and utilities are

switched off which can aid in solving your problems.

- **macOS:** the safe mode helps to disable all third-party extensions and startup items. It executes just the required kernel extensions and Apple-installed startup items.
- **Windows:** safe mode gets Windows started with a limited number of files and drivers.

Troubleshoot update errors

Several update issues are brought on by missing or altered files that Photoshop needs as a result of disk cleaning tools like CleanMyMac or MacKeeper. Keep your cleanup tools up to date, or stop using them.

CHAPTER 10

PHOTOSHOP LAYERS

By stacking pictures, text, or vector drawings one on top of the other in Photoshop without blending their pixels, layers allow non-destructive editing. Use layers to your advantage while creating a collection of images, adding text to a picture, or adding vector graphic forms. You can add layer styles or sharpen objects to create additional effects like a shadow that drops or glows. To make the content on a layer partially translucent, you can also alter the opacity of the layer.

Use layer groups to organize and manage layers

Oftentimes you commence with just one layer when you are working on a new picture, and the number of layers, layer effects, and layer configurations that you can include is limited mostly with the use of your imagination. Control and arrange layers in the layers panel, then utilize groups to arrange them logically and reduce panel clutter. Groups can be nested, and you can use them to simultaneously add features and masks to several layers.

Adjustment Layers

Without having to completely change the pixels in the image, make non-destructive modifications to the colors and tones in your photo as you continue to modify the adjustment layers. In essence, they provide more flexibility and control over image modifications than making direct adjustments.

Smart Objects

Smart objects are layers that have image data from raster or vector pictures; they keep the source content of a picture with all of its initial features, enabling you to get to do all of the nondestructive editing to the layer.

Work with the Layers panel

The Layers panel can be used to view, add, and change layers, layer groups, and layer effects in your image. By selecting Window >

Layers or by pressing F7, you can open this panel. This option can also be used to deal with a layer group, create new or duplicate layers, convert smart objects, and add layer effects. You are also free to choose to make use of this menu for the modification of the thumbnails. Choose the thumbnail you prefer and make use of the right-click option to choose the right size.

Change Thumbnail Contents

Pick panel options from the menu containing layers panel, and choose Entire Document to show the contents of the whole document. Choose Layer Bounds to ensure you restrict the thumbnail to the pixel of the object on the layer. You can also choose to switch off thumbnails to make the performance much better and also save canvas space.

Filter Layers

With the use of the filter choices at the top of the Layers panel find key layers in complex documents. You can also make use of the given options Kind, Name, Effect, Mode, or Artboard to show a subset of the layers.

Follow the steps to make use of the filter choices on the Layers panel.

- Pick a filter type from the menu that shows.
- Choose or insert the filter criteria.
- Choose the toggle switch to change layer filtering on or off.

Video layers

You can include a video to a picture with the use of video layers. After you have imported a video clip into a picture as a video layer, you can do the following;

- Mask/transform the layer
- Apply layer effects
- Paint on individual frames, or you can also,
- Rasterize an individual frame and change it to a standard layer.

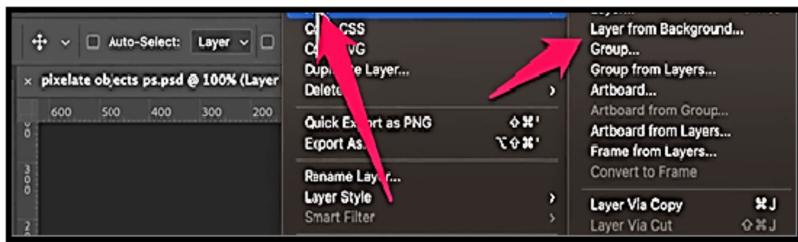
Make use of the panel of the Timeline to play the video that can be found within the picture or to gain access to single frames.

Convert Background and Photoshop Layers

Whenever you are designing a new picture with a white/ colored background, the Background is the starting (bottom-most) layer. It is possible for a picture to have just one Background layer. Although you are unable to alter the stacking order of the layer of the background nor its blending mode and opacity, you can choose to transform it into a normal layer and then get its attributes modified. The image does not have a backdrop layer when creating a new image with transparent content. You have the option to move this layer to any location within the panel that houses layers, their opacity, and their blending mode.

Follow the steps below to have the background layer converted into a regular layer;

- Click twice on Background in the Layers panel or you can also choose to locate Layer > New > Layer from Background.



- Choose layer options.
- Choose OK.

Follow these steps to transform a regular layer into the background layer;

- Choose the regular in the Layers panel.
- Locate Layer > New > Background from Layer. Any pixel that is transparent in the layer will be transformed to the background color and the layer will drop to the lower part of the layer stack.

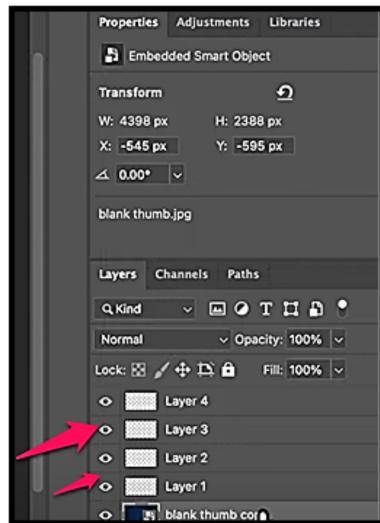
It is worth noting that you cannot design a background by offering a regular layer with the name, Background- you must make use of the Background from Layer command.

Duplicate Photoshop layers

You can make a choice of duplicating a layer within a picture into another or a new picture.

Duplicate a Photoshop layer or group within an image

- Choose a layer or group in the panel Layers panel.



- Do any of the following;

- Move the layer or group you have chosen to the Create a New Layer button.
- You can also choose to select Duplicate Layer or Duplicate Group from the menu containing layers or the Layers panel menu. Insert a name for the layer or group and choose OK.

Duplicate a Photoshop layer or group in another image

- Launch the source and destination pictures.
- From the Layers panel of the source image, choose one or more layers or a layer group.
- Get any of the following done;

- Move the layer or group from the Layers panel to the destination picture.
- Alternatively, you can use the Move tool and navigate from

the source image to the desired image. In the Layers panel of the destination image, the duplicate layer or group will be displayed on top of the active layer. If the source and destination images have the same pixel dimensions, just shift-drag the image content to that location, or, if the source and destination images have different pixel dimensions, to the center of the document window.

- Also, you can choose to duplicate a layer or duplicate group from the menu containing layers or the Layers panel menu. Pick the destination document from the Document pop-up menu, and choose OK.
- Further you can decide to pick Select > All to choose all the pixels on the layer and then Edit > Copy. Once done, move to Edit > Paste in the destination picture. This method will copy just the pixels, leaving out the layers' properties like blending mode.

Create a new document from a Photoshop layer group

- Choose a layer or group from the Layers panel.
- Select Duplicate Layer or Duplicate Group from the Layers menu or the Layers panel menu.



- Select New from the Document pop-up menu and choose OK.

Sample from all visible Photoshop layers

You can smudge or sample color alone from pixels on the active layer with the use of the Mixer Brush, Magic Wand, Smudge, Blur, Sharpen, and Paint Bucket, Clone Stamp, and Healing Brush tools. If you have to smudge or sample pixels from layers that are visible with the use of these tools, choose Sample All Layers from the options bar.

Change transparency preferences

- Move to Edit > Preferences > Transparency & Gamut in

Windows and to Photoshop > Preferences > Transparency & Gamut in macOS.

- Pick the size and color of the checkerboard of the transparency or None for Grid Size to conceal the transparency checkerboard.
- Choose OK.

How to create layers and groups

A new layer is displayed either above the chosen layer or within the chosen group in the Layers panel.

Create a new layer and group

- Do any of the following:
 - To design a new layer or group with the use of default options, choose the Create A New Layer button or New Group button in the panel that contains layers.
 - Select Layer > New > Layer or select Layer > New > Group.
 - Select New Layer or New Group from the Layers panel menu.
 - Alt-click (Windows) or Option-click (Mac OS) the Create A New Layer button or New Group button in the Layers panel to show the New Layer dialog box and configure layer options.
 - Ctrl-click (Windows) or Command-click (macOS) the Create A New Layer button or New Group button in the Layers panel to include a layer beneath the layer that is currently in use.
- Configure layer options, and choose OK;
 - **Name:** indicates a name for the layer or the group.
 - **Use Previous Layer to Create Clipping Mask:** this choice cannot be used for groups.
 - **Color:** this choice helps to assign a color to the layer or group in the Layers panel.
 - **Mode:** indicates a blending mode for the layer or group.
 - **Opacity:** indicates an opacity level for the layer of the group.

Create a layer from an existing file

- Move the file icon from Windows or Mac OS onto an open image in Photoshop.
- Move, scale, or rotate the image that has been imported.
- Touch Enter or Return
 - By default, Photoshop will design a Smart Object layer. If you would like to design standard layers from files that have been moved, deselect Place or Move Raster Images as Smart Objects in the General preferences.

It is worth noting that if the placed file happens to be a multilayer picture, a flattened version will be displayed on the new layer, as against having to copy separate layers, get them duplicated in another picture.

Create a layer with effects from another layer

- Choose the layer that exists in the panel containing layers.
- Move the layer to the Create A New Layer button at the bottom of the Layers panel. The layer that has just been created has all of the effects of the ones that exist.

Convert a selection into a new layer

- Make a selection
- Do any of the following:
 - Select Layer > New > Layer via Copy to get the selection copied into a newly created layer.
 - Tap Layer > New > Layer via Cut in order to cut the selection and then have them pasted into a new layer.

Note that there is a need for you to rasterize Smart Objects or shape layers to allow for these commands to operate.

View layers and groups within a group

- Do any of the following to get the group opened;
 - Choose the triangle to the left side of the icon of the folder.
 - Right-click (Windows) or Control-click (Mac OS) the triangle located on the left of the folder icon and select Open This Group.
 - Alt-click (Windows) or Option-click (Mac OS) the triangle to either launch or close a group and the groups

that is located within it.

Show or hide a layer, group, or style

Displaying or concealing layers, groups, or styles enables you to isolate or see just a few parts of your picture for easy modification.

- Do any of the following in the Layers panel:

- To hide a layer, group, or layer effect's content in the document window, click the eye icon close to it. To re-display the content, click on the column once more. Click the Reveal Effects In panel icon to see the eye icon for styles and effects.
- Click Show Layers or Hide Layers from the menu containing layers.
- To view only the contents of that layer or group, Alt-click (Windows) or Option-click (Mac OS) an eye icon. Before hiding a layer, Photoshop keeps track of its layers' visibility statuses. The original visibility settings are returned by Alt-clicking (Windows) or Option-clicking (Mac OS) the same eye icon without changing the visibility of any other layer.
- Move through the column of the eye to alter the visibility of various items in the panel containing layers.

Copy/paste layers

Layers in Photoshop can now be copied and pasted between documents as well as inside them. Based on your color management options and the color profile associated with the file (or imported data), Photoshop may ask you for advice on how to manage the color information in the data that was imported. There is an avenue for you to employ the use of the Clipboard option in the New Document dialog if you copy a layer and then create a new document. When you select this option, a new document with the size of the copied layers is created. Your copied layers can then be quickly pasted into the new document.

Take note of the following when it comes to copy and pasting of layers;

- If you clone a layer with paths, such as a Shape layer, but no paths are ultimately selected, the layer is transferred to the

clipboard. Making a duplicate shape layer with all bitmap and vector masks, as well as layer effects, is made easier with the aid of pasting.

- If you copy a layer that has paths i.e. a Shape layer and then the paths are chosen on canvas, the path is then copied to the clipboard.
- If you get to copy a layer with the use of a vector mask, but the vector mask is not chosen, then all layer data is copied directly to the clipboard. Pasting designs a duplicate layer which also includes all bitmap and vector masks and layer effects.
- If you get to copy a layer with a vector mask, and the vector mask is chosen, then the path data is copied to the clipboard. Pasting is highly dependent on the context.
- A layer's original pixel measurements are maintained when it is pasted between two pages with different resolutions. This behavior may cause the pasted area to seem out of proportion to the new image. Utilize the Image Size command to compare the dimensions of the source and target pictures before copying and pasting. As an alternative, you can resize the transferred data using the Free Transform command.
- If you choose a layer that doesn't have a path; for instance, a bitmap layer, pasting the path data designs a new vector mask.
- If you choose a layer that has paths; for instance, a Shape layer, but no paths are chosen, then pasting gets to replace the shape currently used in the layer.
- If you choose a Shape layer and choose the path, then pasting helps to paste the path data into the Shape layer that exists, bringing it together with the path that exists.
- If you choose a layer that has a vector mask but the mask is not chosen, then having to paste path data helps to replace the Vector Mask path.
- If you choose a layer with a vector mask, and the vector mask is chosen, then having to paste will paste the path data into the vector mask, bringing it together with the path that exists.

Activity

1. What are Photoshop layers?
2. Create layers and groups.

CHAPTER 11

ADOBE FILTERS

Your images can be cleaned up or retouched using filters, you can add artistic effects that make them seem like sketches or impressionist paintings, or you can make unusual changes to your photos using distortions and lighting effects. The Filter option displays the Adobe-provided filters. There are plug-in versions of some filters made available by outside developers. Upon installation, these plug-in filters can be found in the Filter menu at the bottom. You can utilize filters without causing any damage by applying Smart Filters to Smart Objects. The initial picture data that can be found in the Smart Object can be used to update Smart Filters at any time. Smart Filters are saved as layer effects in the Layers panel.

To make use of a filter, select the appropriate submenu command from the Filter menu. This set of instructions can aid in making your choice of filters;

- Filters are added to the active layers and layers that can be seen or a selection.
- For 8-bit per-channel pictures, most filters can be added cumulatively via the Filter gallery. All filters can be added individually.
- Filters cannot be added to Bitmap-mode or indexed-color pictures.
- Certain filters can work just on RGB pictures.
- All filters can be added to 8-bit pictures.
- For 16-bit images, the following filters can be used: Liquify, Vanishing Point, Average Blur, Blur, Blur More, Box Blur, Gaussian Blur, Lens Blur, Motion Blur, Radial Blur, Surface Blur, Shape Blur, Lens Correction, Add Noise, Despeckle, Dust & Scratches, Median, Reduce Noise, Fibers, Clouds, Difference Clouds, Lens Flare, Sharpen, Sharpen Edges, Sharpen More,
- You can add these filters to pictures of 32-bit; Average Blur, Box Blur, Gaussian Blur, Motion Blur, RadialBlur, Unsharp

Mask, NTSC Colors, Emboss, High Pass, Maximum, Minimum, and Offset.

- Certain filters are usually processed completely in RAM. If you do not have enough RAM to get a filter effect processed adequately, an error message may be displayed.

Apply a filter from the Filter menu

Filter can be added to an active layer, or to a Smart Object. Filters added to a Smart Object are usually non-destructive and can also be remodified at any point in time.

- **Do any of the following;**

- To add a filter to a whole layer, ensure that the layer is either active or chosen.
 - To add a filter to a part of a layer, choose that area.
 - To add a filter in a non-destructive manner so that you can then alter your filter configurations much later, choose the Smart Object that has the image content you would like to get filtered.
- Select a filter from the submenus in the menu containing the filter, If you do not see any dialog box it means that the filter effect has already been applied.
- If a dialog box or the gallery containing the filter shows, insert values or choose options, and then select OK.

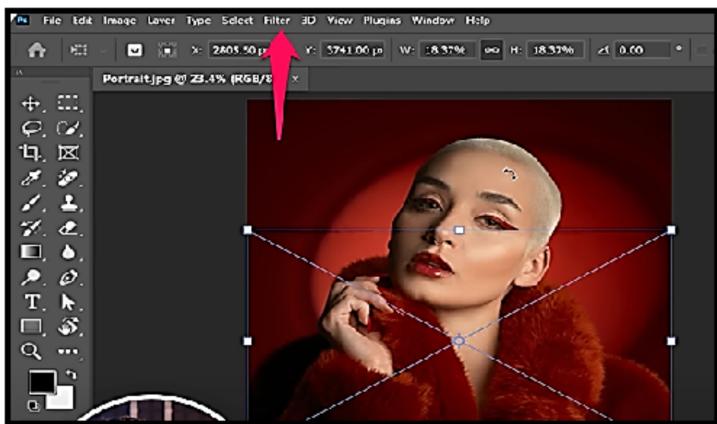
Although applying filters to huge photographs can take some time, you can see the result before applying the filter in the filter dialog box. Drag to center a certain portion of the image in the preview window. You can click on an image in various filters to center it there. To zoom in or out, click the + or - buttons underneath the preview window.

Overview of the Filter Gallery

A glimpse of several of the special effects filters is available in the filter gallery. A filter's effect can be turned on or off, its parameters can be reset, and the order in which filters are applied can be altered. When the preview meets your standards, you may then apply it to your image. The Filter Gallery does not offer all of the filters found in the Filter menu.

To show the filter gallery;

- Select Filter > Filter Gallery. Choosing a filter category name shows thumbnails of filter effects that are available.



To either zoom in or out of the preview;

- Select the + or - button beneath the preview area, or select a zoom percentage of your choice.

To view another area of the preview;

- Move in the preview area with the use of the Hand tool.

To conceal filter thumbnails;

- Choose the Show/Hide button that can be found at the top of the gallery.

Apply filters from the Filter Gallery

The sequence that you choose for the filter effects is followed. After applying filters, you can reorder them by dragging the name of a filter to a different spot in the list of applied filters. Your image's appearance can be drastically altered by rearrangement of filter effects. To remove a filter effect from the preview image, click the eye icon next to the filter.

- By choosing the filter and pressing the Delete Layer icon, you can also remove applied filters.

If there is a need for you to save time when attempting to make use of diverse filters, experiment by choosing a little, representative aspect of your picture.

- **Do any of the following:**
 - To add a filter to a whole layer, ensure that the layer is chosen or actively in use.
 - To add a filter to just an aspect of a layer, choose that specific part.
 - To add a filter in a non-destructive manner so that you will be able to alter your filter configurations much later, choose the Smart Object that has the picture content that you would like to filter.
- Select Filter > Filter Gallery.
- Choose the name of a filter you would like to include first. There may be a need for you to select the inverted triangle close to the filter category to have a view of the total list of filters. Once the addition has been done, the filter will be displayed in the applied filter list in the lower right corner of the dialog box of the Filter Gallery.
- Insert the values or choose options for the filter you chose.
- **Do any of the following:**
 - To add filters in a cumulative manner, choose the New Effect Layer symbol, and then pick another filter to add. Repeat this step once again if there is a need for you to add more filters.
 - To reorganize the filters you added, move the filter to another position in the add filter list in the lower right corner of the dialog box of the Filter Gallery.
 - To take off added filters, choose a filter in the list that contains the added filter, and choose the Delete Layer symbol.
- When you are content with the results, select OK.

Blend and fade filter effects

With the Fade command, the opacity and blending mode of any filter, painting tool, erasing tool, or color adjustment can be adjusted. A subset of the blending modes accessible in the Fade command is also accessible through the painting and editing tool settings. Following assigning the filter effect to a different layer, you can simulate using the fade command by adjusting the layer's opacity and blending mode. It's important to keep in mind that using the Liquify command and Brush Strokes filters can change how the Fade command behaves.

- Add a filter, painting tool, or color adjustment to a picture or selection.
- Select Edit > Fade. Choose the Preview option to have a preview of the effect.
- Move the slider to modify the opacity, from 0% (transparent) to 100%.
- Select a blending mode from the Mode menu. The Color Dodge, Color Burn, Lighten, Darken, Difference, and Exclusion blending modes are of no use on Lab pictures.
- Select OK.

Filter Effects Reference

The following filters offer support for 16-bit/channel and 32-bit/channel documents;

- All Blur filters with the exception of the Lens Blur and Smart Blur
- All Distort Filters
- The Noise > Add Noise filter
- All Render filters with the exception of Lighting Effects
- All Sharpen filters with the exception of Sharpen Edges, etc.

Artistic Filters

For a project in the fine arts or in business, filters from the creative submenu help you generate painterly and creative effects. Use the Cutout filter, for instance, for typography or collages. These filters mimic the effects of traditional or natural media. Through the Filter Gallery, all artistic filters can be used.

- **Colored Pencil:** this choice helps with drawing a picture with the use of colored pencils on a solid background. Edges are kept and offer a rough crosshatch appearance, the solid background color displays through the areas that are much smoother.
- **Cutout:** this choice makes a picture look as though it were created from roughly cut pieces of colored paper. High-contrast pictures look as though they are in silhouette, and colored pictures are built up from various layers of painted paper.
- **Dry Brush:** this option helps with the painting of the edges of the picture with the use of a dry brush technique between

oil and watercolor. The filter helps with the simplification of a picture by bringing a reduction in its range of colors to portions of common color.

- **Film Grain:** This option adds an even pattern to the shadow tones and mid tones. A much smoother, and more saturated pattern is included in the lighter areas. The filter is quite useful for removing banding in blends and unifying elements visually from diverse sources.
- **Fresco:** this option helps with the painting of a picture in a coarse style with the use of short, rounded, and hastily added daubs.
- **Neon Glow:** this option helps with the addition of diverse types of glow to the objects in a picture. This filter is quite useful for colorizing a picture while getting its look softened. To make a choice of a glow color, choose the glow box, and make a choice of color from the Color Picker.
- **Poster Edges:** Posterizes an image by reducing the amount of colors in it in accordance with the posterization setting you have chosen. It also locates the image's edges and adds black lines around them. Simple shading is used in large, open regions, and the image is sprinkled with small, dark details.
- **Rough Pastels:** applies pastel chalk strokes to a textured background. Chalk appears thick and has little texture in areas of bright color; in places of darkness, the chalk appears scraped off to show the texture.
- **Smudge stick:** this helps with the softening of a picture with the use of diagonal strokes to smudge or smear the areas that are dark. Lighter parts become much brighter and details are lost.
- **Watercolor:** Using a medium brush moistened with water and color, this approach paints the picture in a watercolor style, simplifying the details. The filter will make the color-saturated wherever there are significant tonal changes at the margins.

Blur Filters

The Blur filters are helpful for retouching because they soften a selection or an entire image. By averaging the pixels nearest to the sharp edges of drawn lines and darkened areas in a picture, they soften transitions.

- **Average:** identifies the average color of an image or selection and then fills it with that color to give it a smooth appearance. For instance, if you choose a piece of grass, the filter turns it into a uniform patch of green.
- **Blur and Blur More:** remove noise where important color transforms occur in a picture. Blur gets smooth transitions filtered by getting the pixels close to the hard edges of identified lines and shaded portions averaged. The effect of the Blur More filter is three to four times tougher than the Blur filter's effect.
- **Gaussian Blur:** blurs a selection quickly by a programmable margin. The bell-shaped curve produced when Photoshop adds a weighted average to the pixels is regarded as Gaussian. The hazy look that the Gaussian Blur filter can provide is low-frequency detail addition.
- **Radial Blur:** produces a gentle blur by simulating the blur produced by a rotating or zooming camera. Choose Spin and then enter a rotational degree to blur along concentric circular lines. Select Zoom and enter a value between 1 and 100 to blur along radial lines as if you were zooming in or out of the image. Blur quality ranges from Draft to Good and Best (for smoother results). Unless contrasted across a broad range, they are identical. To specify the blur's origin, drag the pattern into the Blur Center box.
- **Shape Blur:** this option makes use of the indicated kernel for the creation of the blur. Pick a kernel from the list of custom shape presets, and then make use of the radius slider to modify its size. You can also choose to load various shape libraries by choosing the triangle and also selecting from the list. The size of the kernel is determined by the radius; the larger the kernel is, the greater the blur.
- **Smart Blur:** this option helps with the blurring of a picture with precision. You can indicate a radius, a threshold, and a blur quality. The radius value helps to determine the size of the portion searched for pixels that are dissimilar. The threshold value establishes how different the pixels must be before they are affected. The entire selection (Normal) or the edges of color alterations can both be configured in a mode. Edge only inserts black-and-white edges and Overlay Edge introduces white where there is a need for significant contrast.

Brush Strokes Filters

The Brush Stroke filters, like the Artistic filters, provide a painterly or fine-art appearance utilizing various brush and ink stroke effects. Some of the filters add texture, noise, edge detail, paint, grain, and grain. Through the Filter Gallery, all Brush Stroke filters can be used.

- **Accented Edges:** accentuates an image's edges. Whenever the edge brightness adjuster is set to a high value, the accents have the appearance of white chalk, while a low value makes them look like black ink.
- **Angled Strokes:** This option helps to repaint a color with the use of diagonal strokes, with much lighter and darker portions colored in strokes going in opposite directions.
- **Crosshatch:** By adding roughness and roughening the borders of the painted parts, this choice helps to maintain the nuances and characteristics of the original image.

Distort Filters

The Diffuse Glow, Glass, and Ocean Ripple filters can be applied using the Filter Gallery. Note that these filters can be highly memory-intensive. The Distort filters physically distort an image, providing 3D or other reshaping effects.

- **Diffuse Glow:** this choice makes a picture as though it was checked with the use of a soft diffusion filter. With the glow fading from the middle of a selection, the filter additions are able to see-through white noise.
- **Displace:** this option makes use of a picture known as a displacement map to determine how a selection can be distorted. For instance, with the use of a parabola-shaped displacement map, you will be able to design a picture that looks as though it was printed on a cloth held up by its edges.
- **Glass:** This option helps to create the illusion that an image is being viewed through various types of glass. You can use a pre-made glass effect or design your own custom glass surface in Photoshop. Scaling, distortion, and smoothness configurations can all be changed. Follow the directions for the Displace filter when using surface controls with a file.

- **Polar Coordinates:** Depending on a chosen option, converts a selection's rectangular coordinates to polar coordinates and vice versa. You can make use of this filter in the production of cylinder anamorphosis, an 18th-century art form in which the distorted image shows as normal when viewed in a mirrored cylinder.
- **Shear:** this option curve-based distortion of an image. By sliding the line in the box, you may specify the curvature. Any point on the curve can be modified. For the curvature to return to being straight, select Default. Additionally, you decide how to handle undistorted parts.
- **Wave:** Similar to the ripple filter in operation, but with more control. The number of wave generators, wavelength (the separation between successive wave crests), the height of the wave, and wave type—sine (rolling), triangle, or square—are all options. Apply random values by using the randomize option. Additionally, undistorted zones can be defined.
- **ZigZag:** this choice leads to a radial distortion of a selection based on the radius of the pixels that are embedded in your selection. The Ridges choice configures the number of direction reversals of the zigzag from the middle of the selection to its corners. You also indicate the manner in which you would like to displace the pixels; Pond Ripples helps with the displacement of pixels to the upper-left or lower right, Out from Center displaces pixels towards or further away from the middle of the selection, and Around Center gets the pixels rotated around the middle.

Noise Filters

The noise filters can be used to add or subtract noise, or pixels with erratic color levels. This aids in blending a selection into the nearby pixels. Noise filters can remove problem areas like dust and scratches or produce interesting textures.

- **Add Noise:** This choice simulates the effect of taking photos on high-speed film by adding random pixels to an image. The Add Noise filter can also be used to give severely retouched regions a more realistic appearance by reducing banding in feathered selections and graduated fills. Gaussian and uniform noise distribution is both possibilities. Using random numbers between 0 and plus or minus the set value, the uniform

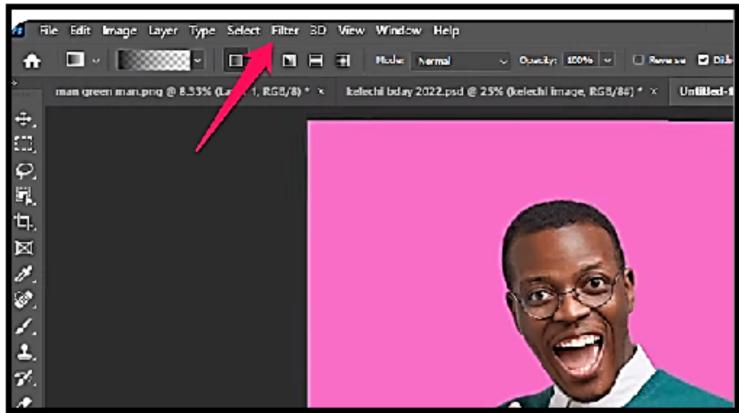
distributes color values of noise to produce a subtle effect. Gaussian speckles an image by distributing the color values of noise along a bell-shaped curve. With the Monochromatic setting, the filter is solely applied to the image's tonal components, leaving the colors unchanged.

- **Median:** optimizes the brightness of a few chosen pixels to minimize image noise. After scanning the radius of a pixel selection for pixels of identical brightness and removing pixels that deviate too much from neighboring pixels, the filter substitutes the center pixel with the median brightness rating of the searched pixels. With the aid of this filter, the impact of motion on an image can be diminished or eliminated.
- **Reduce Noise:** this option brings about a reduction in the noise while keeping edges depending on user configurations affecting the overall image or individual channels.

Render Filters

This filter aids in the development of cloud patterns, refraction patterns, and simulated reflections of light in photos. Additionally, you have the option to modify things in 3D space, create 3D objects (such as cubes, spheres, and cylinders), and create texture fills from grayscale files to create 3D-like effects for optimal lighting.

- **Clouds:** uses random values that fluctuate between the foreground and background colors to create a gentle cloud pattern. Press down Alt (Windows) or Option (Mac OS) as you select Filter > Render > Clouds to create a cloud pattern that is more pronounced. The image data on the active layer is changed when the Clouds filter is applied.



- **Difference Clouds:** uses randomly generated values that alternate between the foreground and background color to produce a cloud pattern. The filter merges the cloud data with the pre-existing pixels in a manner akin to how the distinct mode blends colors. When you first choose this filter, a cloud pattern is created by inverting portions of the image. The filter produces rib and vein structures that imitate the texture of marble when it is applied repeatedly. When the Difference Clouds filter is used, the image data on the active layer is replaced.
- **Fibers:** uses the foreground and background colors to give the impression of weaved strands. You can adjust the color variation using the Variance slider (a low number results in lengthy streaks of color, while a high value produces extremely short threads with a more varied distribution of color). Each fiber's appearance is controlled by the Strength slider. When the setting is low, the weave is loose, and when it is high, the fibers are short and stringy. To alter the pattern's appearance, click the Randomize button. You can click the button multiple times until you discover a design you like. The active layer's image data is replaced when the Fibers filter is applied.

Tips for creating special effects

Creating edge effects

You can use a number of techniques to manage the margins of an effect that was only applied to a piece of an image. To leave a

distinct edge, apply the filter. Use the filter to create a fine edge after first feathering the edge. Apply the filter, and then alter the selection's blending mode and opacity with the Fade command to give it a transparent appearance.

Applying filters to layers

To create an effect, you can add filters to specific layers or to a series of layers. The layer must be relatively visible and have pixels, such as a neutral fill color, in order for a filter to affect it.

Applying filters to individual channels

You can choose to include filters to a different effect to each color channel, or add the exact same filter but with diverse configurations.

Creating backgrounds

Effects can be applied to solid-color or grayscale objects to produce a variety of backdrops and textures. Next, you may haze over these textures. Some filters, like Glass, have a negligible impact when used with solid colors, while others yield intriguing results.

Combining multiple effects with masks or duplicate images

Masks can be used to create selection areas and give you more control over how different effects transition from one to another. The selection made with a mask, for instance, can be filtered. The History Brush tool can also be used to paint a filter effect onto certain portions of a photograph. First, apply the filter to the entire image. Next, go back to the previous state of the image in the History panel before configuring the history brush origin to the modified state by clicking in the well to the left of the history state. Then commission the painting.

Improve image quality and consistency

By giving each image the same look, you can hide flaws, change or enhance photos, or connect images together. You can apply the modifications you make to one image to the others by first recording them in the Actions window.

Lastly, certain filter effects can be quite memory-intensive,

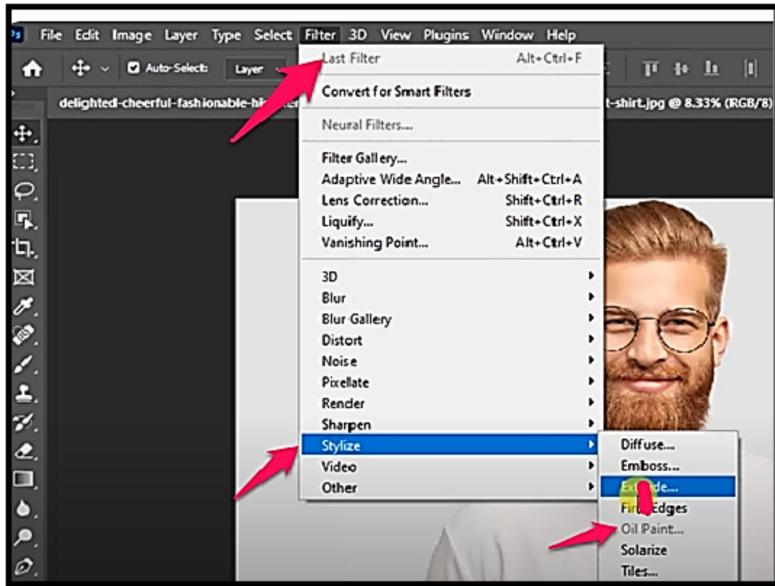
most especially when added to a high-resolution picture;

- You can choose to do any of the following to improve performance;
 - Attempt to make use of filters and configurations on a little portion of a picture.
 - Add the effect to individual channels; for instance, to each RGB channel if the picture is big and you are experiencing problems with lack of memory. Note that with certain filters, effects are not the same if added to the individual channel as against the composite channel, especially if the filter modifies pixels in a random manner.
 - Add some space to the memory prior to running the filter by making use of the Purge command.
 - Apportion more RAM to Photoshop. If need be, leave other applications to create more memory available for Photoshop.
 - To speed up memory-intensive filters like Lighting Effects, Cutout, Stained Glass, Chrome, Ripple, Spatter, Sprayed Strokes, and Glass, experiment with different settings. (For instance, increase cell size while using the Stained Glass effect. Increase Edge Simplicity, decrease Edge Fidelity or both with the Cutout filter.)
 - If you have a plan to print to a grayscale printer, transform a copy of the picture to grayscale prior to adding filters. Nevertheless, adding a filter to a color picture, and then transforming to grayscale may not necessarily have the same effect as adding the filter to a grayscale version of the picture.

Working with the oil paint filter

By employing an oil painter, you may convert a photo into an image that has the look of an old-style oil painting. You may change the degree of stylization, brush size, cleanliness, and other characteristics using a few very basic sliders.

Click on Filter > Stylize > Oil Paint in order to make use of the filter. You can also modify the following configurations for the filter;



- **Stylization:** this option helps to modify the style of the strokes which ranges from a daubed look at 0 to smooth strokes at 10.
- **Cleanliness:** This alters the stroke length as well, which goes from the shortest and choppiest at 0 to the longest and most flowing at 10.
- **Scale:** This changes the relief of the paint's apparent thickness from a thin layer at 0 to a thick coat at 10, creating beautiful paint globs a la Vincent van Gogh.
- **Bristle Detail:** varies the amount of paintbrush-hair indentation that is visible, from leaving delicate grooves at 0 to releasing strong grooves at 10.
- **Angle:** alters the incidence angle of the light. This configuration is significant if you are adding the oil painting to a different scene.
- **Shine:** changes the light source's brightness and the quantity of reflection off the paint's surface.

The OilPaint filter was redesigned for Photoshop 23.2 in order to make greater use of the native GPU resources on macOS and Windows. When working on bigger files, this increased efficiency becomes very clear. There were no further changes to the filter.

Using the Liquify filter

Any part of an image can be pushed, pulled, rotated, reflected, puckered, and bloated using the Liquify filter. The Liquify command is a potent tool for artistic effects and picture retouching since the distortions you produce might be mild or severe. Images with 8 or 16 bits per channel can be subjected to the Liquify filter. In the dialog box of Liquify filter, you can find Tools, options, and an image preview. If you would like to show the dialog box, select Filter > Liquify. Choose Advanced Mode to gain access to more options.

Magnify or reduce the preview image

Pick the Zoom tool from the Liquify dialog box. To zoom in or out, click or drag the preview image; while doing so, hold down the Alt or Option keys. You can also specify the magnification level in the Zoom text box at the lower part of the dialog box.

Navigate in the preview image

Choose the Hand tool in the Liquify dialog box, and move in the preview picture. As an alternative, press down the spacebar with the use of any tool chosen, and move in the preview picture.

Liquify filter enhancements (Creative Cloud only)

The Liquify filter in Photoshop's Creative Cloud edition is far quicker than its predecessors. Smart Objects, which contain Smart Object video layers and may be inserted as a smart filter, are now supported by the Liquify filter. The recently introduced behavior for the Reconstruct tool is another improvement to the Liquify filter. The Reconstruct tool will smooth a warp rather than scale it back or remove it if you press and hold the Alt (Windows) or Option (Mac OS) key whilst sliding the tool across a warp.

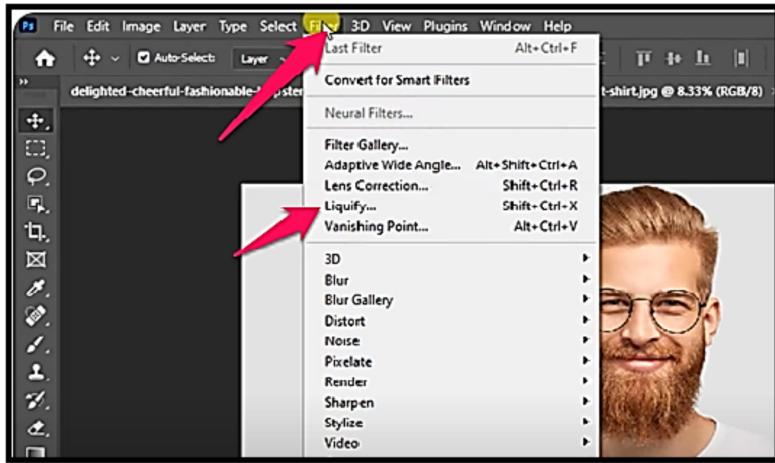
Applying Liquify as a smart filter (Creative Cloud only)

A smart filter that can handle smart objects, especially smart object video layers, is the Liquify filter. When applying the Liquify filter on a Smart Object, meshes are now automatically saved in your

document. Meshes included in Smart Objects become reduced and modifiable once again when the Liquify filter is applied again. Keep in mind that integrated meshes, even compressed ones, cause the file size to increase.

To have the Liquify filter added as a smart filter, do the following;

- In the Layers panel, choose a Smart Object layer.
- Choose Filter > Liquify



Face-Aware Liquify

The Liquify filter has cutting-edge face-aware capability that recognizes eyes, noses, mouths, and other facial features automatically and makes it simple for you to make adjustments. Face-Aware Liquify is excellent for editing portrait images, drawing caricatures, and performing a variety of other tasks.

Adjust facial features using on-screen handles

- In Photoshop, launch a picture with one or more faces.
- Choose Filter > Liquify. Photoshop will then open the dialog for the Liquify filter.
- In the Tools panel, choose the person symbol. The faces in the picture are instantly recognized.

Distortion tools

When you drag or hold down the mouse button, different tools in

the Liquify dialog box help to distort the brush area. The distortion is most noticeable in the center of the **brush region**, and it gets worse the longer you hold down the mouse button or move your cursor over a region.

- **Forward Warp tool:** this option pushes pixels to the front as you move.
- **Reconstruct tool:** this choice reverses the distortion you have included already as you hold down the button of the mouse and move.
- **Twirl Clockwise tool:** rotates pixels in a clockwise manner as you press down the button of the mouse or move. To twirl pixels in a counterclockwise manner, press and hold down Alt (Windows) or Option (Mac OS) as you hold down the button of the mouse or move.
- **Pucker tool:** this option drags pixels towards the middle of the brush portion as you hold down the button of the mouse or move.
- **Bloat tool:** this option drags pixels away from the middle of the brush portion as you press down the button of the mouse or move.
- **Push Left tool:** When you drag the tool straight up, pixels travel to the left (down, pixels go to the right). You can also drag an object in a clockwise or counterclockwise direction to change its size. Holding down Alt (Windows) or Option (Mac OS) while dragging will cause pixels to be pushed to the right when you drag straight up or left when you drag down.

Follow the sets of instructions below to distort an image;

- Choose the layer you would like to distort. To alter just a part of the layer currently in use, choose that specific area.
- Select Filter > Liquify.
- Freeze the parts of the picture that you would not like to alter.
- Pick any of the liquify tools to distort the preview image. Move-in the preview image to have the image distorted.
- **After getting the preview image distorted, you can;**
 - Make use of the Reconstruction tool or Reconstruct Options to totally or partially get the changes reversed.
 - Employ the use of the other tools to alter the image in new ways.

● Do any of the following:

- Select OK to have the Liquify dialog box closed and then add the changes to the current layer.
- Select Cancel to close the dialog box of the Liquify without adding changes to the layer.
- Press and hold down Alt (Windows) or Option (Mac OS) and choose Reset to have all distortions reverted to the preview image and reset all options to their defaults.

Freeze and thaw areas

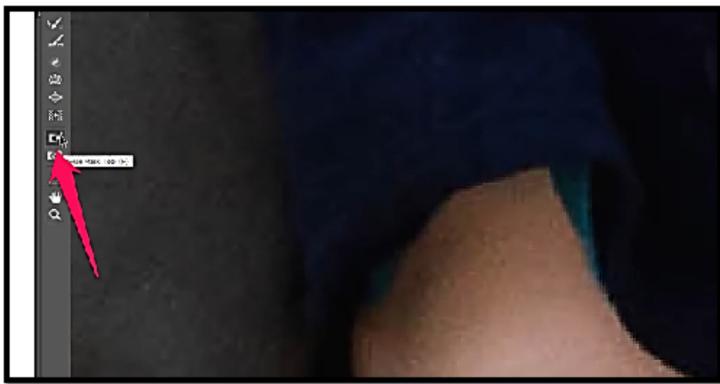
You can freeze portions that you would not want to alter or thaw frozen areas to ensure that they become editable once more. You can also make a choice of inverting both frozen and thawed parts.

Freeze areas

By freezing sections of the preview image, you secure certain areas from modifications. Using the Freeze Mask tool, you paint a mask over the frozen areas to hide them. To freeze areas, you can also use an existing mask, selection, or transparency.

You can apply distortions by viewing the mask in the preview image.

● **Using the Freeze Mask tool:** choose the Freeze Mask tool and move over the part you would like to get protected.



- Shift-click to freeze in a straight line between the points that was previously chosen to the current point in use.

● **Using an existing selection, mask, or transparency**

channel: If you happen to be adding to a layer that has a selection, layer mask, transparency, or alpha channel, the Liquify filter, pick Selection, Layer Mask, Transparency, or Quick Mask from any of the five symbols pop-up menu in the Mask Options part of the dialog box. This helps to determine just how parts of the preview image are frozen or masked.

- **Freezing all thawed areas:** Choose Mask All in the Mask Options part of the dialog box.
- **Showing or hiding frozen areas:** Select or deselect Show Mask in the View Options part of the dialog box.

Thaw areas

To thaw frozen parts so that they become editable, do any of the following;

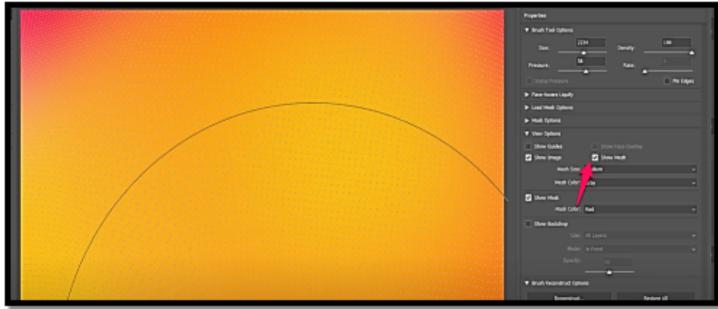
- Choose the Thaw Mask tool, and move over the area. Shift-click to thaw in a straight line between the point in use and the previously chosen point.
- To have all frozen parts thawed, choose the none button in the Mask Options part of the dialog box.
- To make inverted frozen and thawed parts, choose Invert All in the Mask Options part of the dialog box.

You can utilize a range of controls and reconstruction techniques to undo or redo adjustments after distorting the preview image. There are two techniques to apply reconstructions. To lessen distortion in portions of the image that aren't frozen, you can apply a reconstruction to the entire image or use the reconstruction tool to recreate a specific area. The reconstruction of damaged regions can be stopped using the Freeze Mask tool.

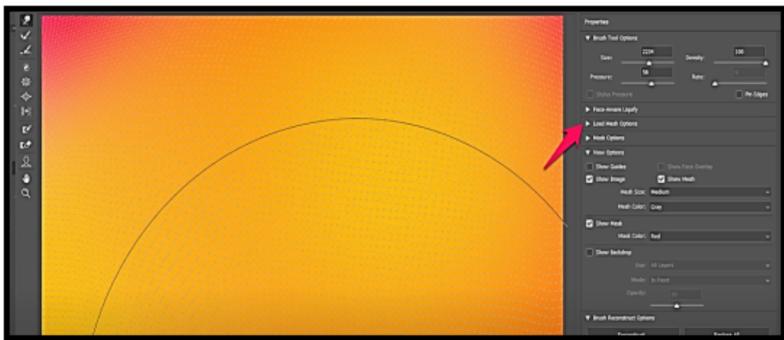
Using a mesh

You are able to view distortions while keeping track of them by using a mesh. A mesh can be customized in terms of size, color, and the ability to be kept from a single picture and added to others.

- To display a mesh, choose Show Mesh in the View Options part of the dialog box, and make a choice of a mesh size and mesh color.



- To show just a mesh, choose Show Mesh and then deselect Show Image.
- To keep a distortion mesh, after getting the preview image distorted, choose Save Mesh. Indicate a name and location for the file of the mesh and choose Save.
- Click Load Mesh



- Choose the mesh file you want to use, then click Open to apply a stored distortion mesh. The distortion mesh is resized to suit the image if the image and mesh don't have the same dimensions.
- To add the distortion mesh you last saved, choose Load Last Mesh.
- (Creative Cloud) Meshes are instantly saved in your document. Meshes added to Smart Objects are compressed and made re-editable.

Remember that you can decide whether to display extra layers in the preview image as a background or only the current layer. You can place the background in front of or behind the active layer

using the Mode settings to keep track of your modifications or to align one distortion with another distortion created in a different layer.

Activity

1. What are Adobe filters and how can you make the best use of them?
2. Make use of the oil painter filter.
3. What is a Liquify tool?
4. What is a mesh and how is it used?

Chapter 12

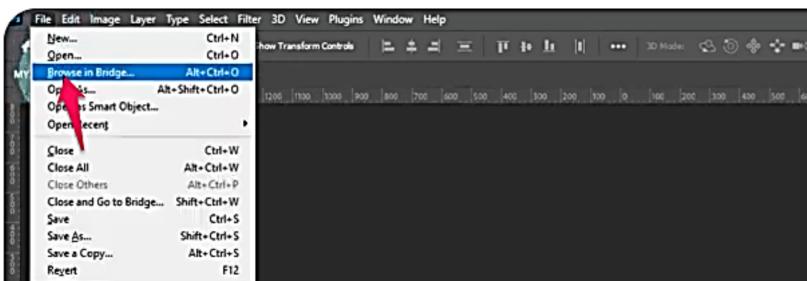
Adobe Bridge

Adobe Bridge is a one-of-a-kind asset management solution designed exclusively for visual search. It simplifies the process of locating specific designs or content within the programs on which you rely. Furthermore, it enables your creative team to carefully categorize materials using labels, ratings, keywords, metadata, and other features. This ensures that you and your team have quick access to the resources you require, exactly when you need them.

To open files with the use of Adobe Bridge, you must ensure that the application is installed on your system. If it is not, the **File > Browse** that can be found in the Bridge command in Photoshop will launch the Creative Cloud desktop application, which will then have the bridge downloaded and installed. Once you are done with the installation, you can then launch Bridge.

Follow the steps below to have files opened in Adobe Bridge;

- Launch Photoshop, and then simultaneously **press and hold down Ctrl + Alt + Shift (Windows) or Command + Option + Shift (Mac OS)** to have the default settings returned to custom mode.
- When you notice a prompt, choose Yes to confirm that you would like to delete the Adobe Photoshop settings file.
- Select **File > Browse in Bridge**.



If you take note of any prompt to have the Photoshop extension enabled in Bridge, choose **Yes or OK**. Take note that if Bridge inquires if you would like to bring in references from a former

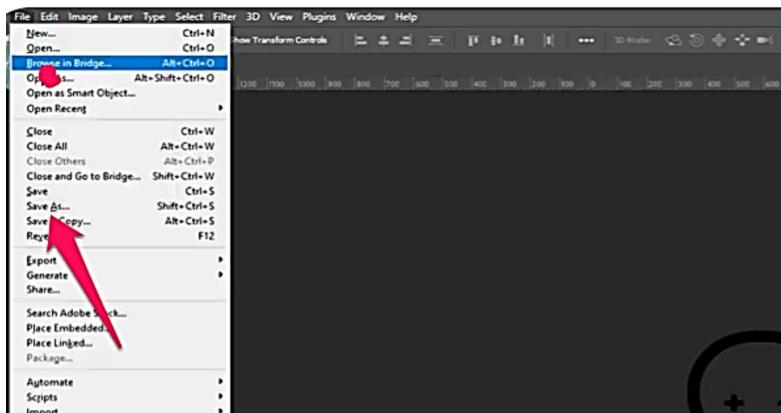
version of Bridge, choose **Don't Show Again** and choose **NO**.

Adobe Bridge will then be opened, showing a collection of diverse panels, menus, and buttons.

- Select the **Folders tab in the upper-left corner**, and then navigate **to the folder you have there**.
- You can choose to add this folder to your favorites by clicking on **File > Add To Favorites**.

If the Favorites panel list and the folder you want to add to Favorites are both visible in Bridge, you can drag & drop the folder into the Favorites panel. You may also add a folder from your computer's desktop to the Favorites window using drag and drop.

- Once that has been done, to open the folder you can navigate to the Favorites tab, and then choose the preferred folder to open it.
- Once you have chosen the folder and reached the file you would like to open, choose **File > Save As**. Then select Photoshop from the Format menu, give the file a name, and then save the file.



If Photoshop prompts you to choose between saving to Cloud Documents and saving to your computer, select **On Your Computer**. You can also choose **Don't Show Again**, however, this option will be deactivated if you restore Photoshop preferences.

Strategy for retouching

The amount of retouching you apply depends on the image and your aims for it. You may merely need to alter the lightness or color of numerous photographs or repair a little defect. Others may require you to execute many jobs and use more complicated tools and strategies.

Most procedures for retouching follow the basic steps below;

- Making a duplicate of the initial image; working on a copy of the image ensures that the main image is kept safe in case there is a need for you to commence all over again.
- Verify if the resolution is sufficient for the purpose for which you plan to use the image.
- Cropping the image to fit the final dimensions and layout.
- Altering the tonal range or overall contrast of the picture.
- Eliminating a color cast is similar to adjusting an overly blue photograph.
- Repairing defects in damaged photo scans.
- Adjusting the color and tone in certain areas of the image to highlight the key points, midtones, shadows, and desaturated hues.
- Getting the image well sharpened.

Depending on the project, the order of the tasks might not be the same and not all tasks may be required for all projects. Tones and color correction are often the first steps in a basic workflow, and the final steps typically include altering the pixel size and sharpening the final delivery medium.

Adjusting your process for different intended uses

The options you make when retouching an image are influenced by how you want to use the image. For example, if an image is meant for black-and-white printing on a newspaper, cropping and sharpening options may differ from those used for a full-color web page. Photoshop provides RGB color mode for online and mobile device authoring and desktop picture printing, CMYK color mode for printing preparation utilizing process colors, Grayscale mode for black-and-white printing, and additional color modes for more

specialized needs.

Photoshop may also be used to change the pixel size or resolution of an image. In general, plan to perform most modifications on a fresh full-resolution, high-quality original image, and then generate copies for specific usage, such as print or the web, that are altered for the unique requirements of each of those media.

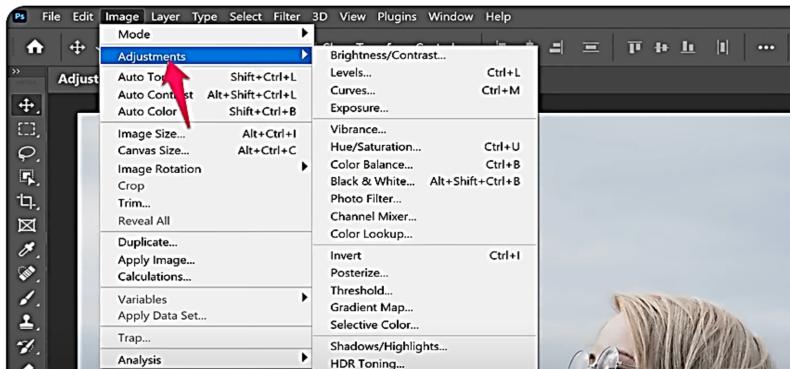
Adjusting the color and tone

You can modify image tone and color with the use of adjustment layers or by editing in Adobe Camera Raw. The two options provide a high level of control and flexibility without permanently modifying or destroying the underlying image data. You can maintain the integrity of your original photos. Even after saving the changes, you can reverse them, make further adjustments, or start over using a different editing strategy thanks to this nondestructive editing method.

You can utilize adjustment layers to make changes to a different layer in an image file while maintaining the initial picture (background layer) intact. You are able to find the adjustment layer options by selecting an icon in the Adjustments panel. More extensive image manipulation can be achieved by utilizing many adjustment layers. Using a mask, you may also apply the change to a specific area of the picture.

With the Adobe Camera Raw Photoshop plugin, you can alter color and tone. A sizable preview image can be found in the editing window, and the editing options are arranged how you would often use them. Notwithstanding its title, Adobe Camera Raw may alter raw data from the camera in addition to JPEGs and TIFFs. Preset the parameters and use them as needed if you wish to apply the same change to many photos.

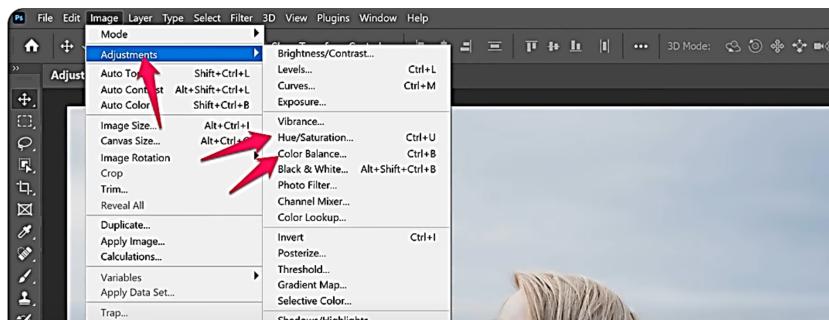
It's important to remember, though, that you should only use the commands located within the **Image > Adjustments** window if the specific adjustment you're looking for cannot be found in Camera Raw or as an adjustment layer.



The adjustments beneath the Image menu completely modify or delete pixel data that are in your image.

Using adjustment layers to change the color and tone of a picture

- Select the tool symbol for the modification you want to make in the Adjustments window;
 - In the event that tone and color adjustments are needed, choose Levels or Curves.
 - To change the color, select Hue/Saturation or Color Balance.



- If you need to transform a colored photo to black and white, choose Black & White.
- Adjust the layer tool configurations for the adjustment layer in the properties panel.

Changing the color and tone of an image in Camera

Raw

- Select **Open under File**.
- Choose one or more **TIFFs**, **JPEGs**, or camera raw documents from the Open window. Then, select **Camera Raw** using the Format window's option.
- Choose **Open**.
- To change the configurations, use the controls that are available in Adobe Camera Raw. Additionally, you can apply adjustments to specific areas of the image by using the Adjustment brush. It should be noted that you have the option to set options to open TIFFs and JPEGs in Camera Raw by default.

Enable editing of JPEGs and TIFFs in Camera Raw

- Choose **Edit > Preferences > Camera Raw (Mac OS) or Photoshop > Preferences > Camera Raw (Windows)**.
- In the JPEG and TIFF processing section of the Camera Raw Settings dialog box, fill in any of the subsequent fields.
 - Choose the option to "**Automatically Open All Supported JPEGs**" from the menu.
 - Select the option labeled **Automatically Open All Supported TIFFs** under the **TIFF** menu.

It is worth mentioning that, in conjunction with the two workflows outlined previously, you can also use Smart Objects to edit layers in a non-invasive manner.

Sharpening the image

Sharpening improves the definition of an image's edges. Most photographs, whether from a digital camera or a scanner, can gain so much from sharpening. The amount of sharpening required is determined by the quality of the digital camera or scanner. Remember that sharpening cannot fix a very blurred image.

Below are tips to help better your sharpening;

- In order for you to be able to resharpen your image later to output to another medium, ensure that you sharpen the image on a different layer.
- If you sharpen your picture on a different layer, configure the blending mode of the layer to Luminosity so that you can avoid shifts in color along the edges of the image.
- Sharpening brings about an increment in the contrast of an image. If you notice that the highlights or shadows are clipped after you have sharpened the image, make use of the layer blending controls for the prevention of sharpening in both shadows and highlights. Ensure that you indicate a tonal range for blending layers.
- Make a reduction in the noise of the image before you sharpen, with this you will not get the noise intensified.
- Sharpen your image several times in small increments. The first time, you enhance to correct a blur induced by the process of collecting the picture (scanning it or photographing it with your digital device). After color correction and scaling your image, enhance it again (or make a copy of it) so you may include the right degree of sharpness for your output media.
- Try to use the final medium to gauge how well you've sharpened it. Since different output media require different amounts of sharpening, this is typically not constant.

Use the Smart Sharpen or Unsharp Mask (USM) filters for greater control when sharpening your photos. Sharpen, Sharpen Edges, and Sharpen More are filters in Photoshop, although they are automatic and don't have any options or adjustments.

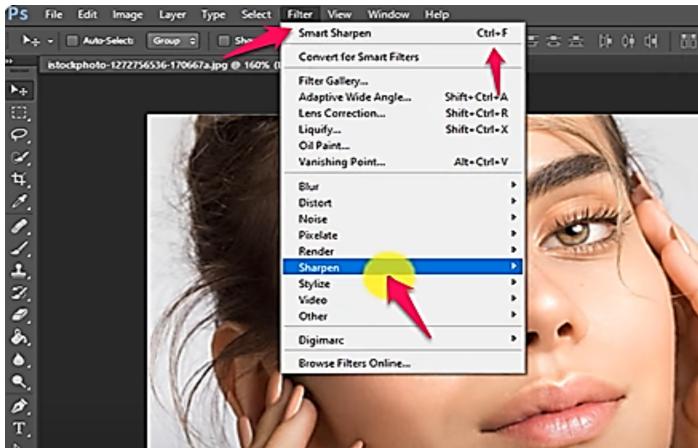
Using a selection or mask, you can improve your image as a complete or simply a specific area. One layer at a time application of the Unsharp Mask and Smart Sharpen filters may need you to merge layers or flatten a multidimensional file in order to sharpen every layer of a photo.

Sharpen with the use of Smart Sharpen

One sharpening option that's missing from the Unsharp Mask filter is the Smart Sharpen filter. Along with the degree of sharpness in

the highlight and shadow parts, you can adjust the sharpening algorithm.

- To ensure you get an ideal view of the sharpening, zoom the document area up to around 100%.
- Choose **Smart Sharpen** under Filter > Sharpen (ctrl + f).



- Configure the controls in the Sharpen tabs;

Amount: This option helps to customize the sharpening intensity. The contrast around edge pixels is enhanced by a larger value, giving the impression of overall sharpness.

Radius: This option helps to calculate the total number of pixels that surround the edge pixels that are sharpened. The sharpening becomes more evident and the edge impacts wider the larger the radius value.

Remove: this option takes away unwanted noise while ensuring that important edges are kept unaffected.

- **Gaussian Blur:** This is the Unsharp Mask filter's setup option.
- **Lens Blur:** This option aids in the detection of edges and information in a photograph, as well as sharper sharpening of information and a decrease in sharpening halos.
- **Motion Blur:** attempts to minimize the blur effects caused by moving subjects or the camera. Set the Angle parameter if you decide to use

Motion Blur.

- **Angle:** configures the path of Motion Blur choice of the Remove control.
- **More Accurate:** This option is typically available whenever you are using the legacy technique and processing the file slowly for more precise blurring removal.
- The Shadow and Highlight sections allow you to fine-tune the sharpening of both light and dark areas. (To see the tabs, click **the Advanced option**). If the dark or bright sharpening halos appear excessively intense, you can minimize them with the following options, which are only accessible for photos with 8 bits or 16 bits per channel:

Fade Amount: This feature aids in adjusting how much sharpening is applied to the highlights and shadows.

Tonal Width: regulates the range of tones that is changed in the highlights and shadows. To increase or decrease the Tonal Width value, drag the slider all the way to the left or right. Consequently, smaller numbers limit the shadow and highlight adjustment to just the darker and lighter parts.

Radius: To determine whether a pixel falls within the highlights or shadows, the region surrounding each pixel is used. A smaller area is indicated by moving the scale to the left, and a larger area is indicated by moving the scale to the right.

- Select OK.

Sharpen with the use of Unsharp Mask

The Unsharp Mask improves an image by making the picture's edges more contrasty. The Unsharp Mask does not detect image edges. Rather, it searches for pixels whose values deviate from the surrounding pixels via the threshold you set. Next, you can adjust the degree to which the contrast between neighboring pixels is raised. Consequently, for neighboring pixels, lighter pixels become brighter, and darker pixels go darker.

Additionally, the radius of the area where each and every pixel is compared is provided. The radius increases with the prominence of the edge effects. The degree to which an image is sharpened is typically a matter of taste. Remember that an excessive amount of sharpening will cause a halo to form around the edges of the picture.

The effects of the Unsharp Mask filter will not show up in high-resolution output; instead, they will be shown on screen. Try running an experiment to find the parameters that work best for your image if printing is your ultimate goal.

- Choose the layer that has the image you want to sharpen if your picture is separated into layers. Unsharp Mask may only be applied to a single layer at a time, regardless of whether it has been grouped or connected. You can mix the layers before using the Unsharp Mask filter.
- Choose **Filter, then Sharpen, then Unsharp Mask**. Verify that you have the preview option selected. Remarkably, you can see how the image appears without sharpening it if you choose it in the preview box and press the mouse button. Go to the preview box, click + or - to zoom in or out, and you can see various features of the image. You can see the effects of the filter in the document window by dragging the Unsharp Mask options, even though it has a preview pane.
- Choose the number of pixels that surround the edge pixels that influence sharpening by dragging the Radius scale or entering a value. The radius value increases in direct proportion to the edge effects' size. Whenever the edge effects are wider, the sharpness is more apparent.

The ultimate reproduction size, output method, and subject matter all affect the Radius value. For high-resolution images, a radius value of one to two is advised. A lesser value merely sharpens the edges of the pixels, but a larger value sharpens a larger range of pixels. In a high-resolution print picture, a 2-pixel radius implies a smaller part, therefore this effect is far less obvious than on screen.

- To change the amount that the pixels' contrast is raised, move the Amount scale or input a value. It is often advised to choose a value of 150% to 200% for high-resolution printed

photographs.

- To choose how different the sharpened pixels must be from their surrounding region in order to be identified edge pixels and improved by the filter, adjust the Threshold slider or input a value. Any pixel in an array of 0 to 255 having a tone value variation of 4 or greater is affected by a threshold of 4. Consequently, adjacent pixels having tonal values ranging from 128 and 129 remain unchanged. When creating photographs with skin tones, for instance, use an edge mask or experiment with threshold settings between 2 and 20 to prevent distortion or posterization. By default, threshold (0) brightens every pixel in the picture.

Note that you can choose **Edit > Fade Unsharp Mask** and select **Luminosity** from the Mode menu if applying Unsharp Mask causes already bright colors to appear overly saturated.

Get to Sharpen Selectively

Use a mask or selection to sharpen specific areas of your image to prevent sharpening the entire thing. For example, you can use an edge mask along with the Unsharp Mask effect on a portrait to sharpen the nose, eyes, lips, and head outlines, but not to improve skin smoothness.

Follow the steps below to sharpen a selection;

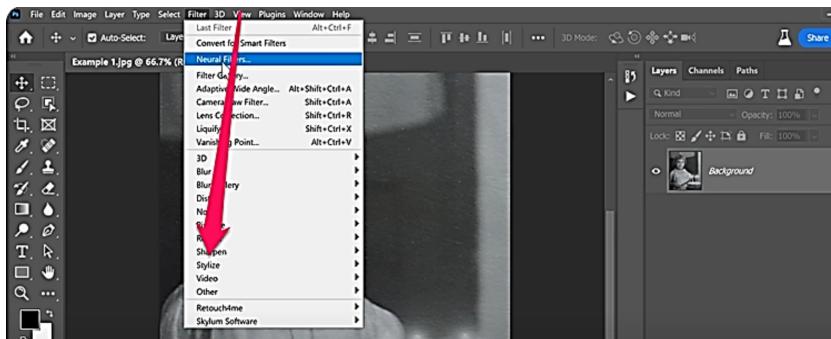
- After picking the image layer chosen in the panel containing layers, draw a selection.
- Select **Filter > Sharpen > Unsharp Mask**. Modify the options and choose OK. Just the selection will be sharpened, and the remainder of the images will be left untouched.

To sharpen an image with the use of an edge mask;

- Create a mask to apply selective sharpening. There are several approaches to creating an edge mask. Utilize your favorite technique, or try this one instead;
 - Open the **Channels panel**, then select the channel that displays in the document window the grayscale image with the highest contrast. This is often either the red or

green channel.

- Get the chosen channel duplicated.
- With the duplicate channel chosen, select **Filter > Stylize > Find Edges**.



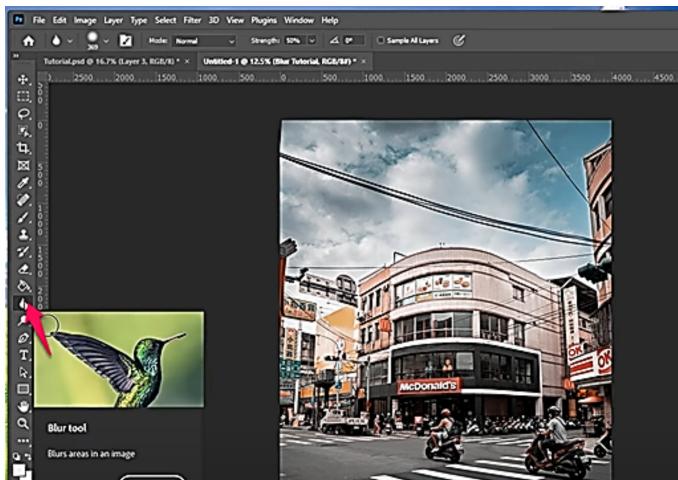
- Pick **Image > Adjustments > Invert** to get the image inverted.
- Navigate to **Filter > Other > Maximum** while the inverted image is still chosen. To make the margins thicker and the pixel allocation more random, reduce the radius to a low value and click OK.
- Select **Filter > Noise > Median** from the drop-down menu. Click OK after lowering the radius to the desired level. The median of the nearby pixels is determined in this way.
- For random pixel removal, increase the black point under **Image > Adjustment > Levels**. Utilize black paint to fix the last edge mask if necessary.
- Select **Gaussian Blur** under **Filter > Blur > feather the edges**.

- Click the **duplicate channel** in the **Channels panel** (**Ctrl-click on Windows, Command-click on Mac OS**) to generate the edge mask option.
- In the panel containing layers, choose the image layer. Ensure that the selection can still be seen in the picture.
- Pick **Select > Inverse**.

- Once the image layer option is active, choose **Filter > Sharpen > Unsharp Mask**. After configuring the parameters you have chosen, click **OK**. Uncheck the selection in the picture and select the RGB channel within the channel panel to view your results. It's important to remember that you can easily add each step of the procedure by creating an action.

To achieve a sharper image, try any of the following:

- Choose the **Sharpen tool**. If you are unable to locate this tool, hold down the **Blur tool**.



- Use the choices bar to do any of the following;
 - Select a **brush tip** and set the blending mode and strength options.
 - To refine using information from every visible layer, choose **Sample All Layers**. Only active layer data will be used by the tool if this option is left unchecked.
 - By choosing **Protect Detail**, you can reduce pixelated artifacts and enhance detail. Should you desire more intense sharpening effects, deselect this option.
- Move over the area of the picture you would like to get sharpened.

Activity

1. What is an Adobe bridge?
2. What are the basic procedures for retouching an image?
Retouch any of your images following these procedures.
3. Sharpen any image in your file.

Chapter 13

Snapshot

You can take a quick snapshot, or temporary copy, of any picture state with the Snapshot command. The list of pictures in the History panel is expanded to include the new one. You can begin working with a snapshot version of the picture by selecting it.

Snapshots are identical to the states displayed in the History panel, but they have the following benefits:

- You can give a name to a snapshot to ensure that it is quite easy to identify.
- Snapshots can be saved for a whole work session.
- It's also simple to compare effects. For instance, you may take a picture both before and after using a filter. Next, experiment with different setups of the same filter using the original snapshot. Navigate through the many snapshots until you locate the configurations you wish to use.
- You can simply retrieve your work with snapshots. Before attempting a challenging technique or incorporating an action, take a picture. You can undo anything you did before using the snapshot if you are not happy with the results.

Snapshots are deleted when you close the image and are not saved with it. Additionally, choosing a snapshot and editing the image removes all of the current states displayed in the History panel unless you choose to **Allow Non-Linear History**.

Create a snapshot

- Choose your preferred state and then do any of the following;
 - The History screen has a generate New Snapshot button. Assuming **Automatically Create New Snapshot** is turned on, click it to generate a snapshot instantly. Click the **New Snapshot option** within the History panel's option once Saving has been chosen in the

choices.

- You can choose to Alt-click or Option-click the Create New Snapshot option to customize your options when taking a snapshot, or you can choose to pick New Snapshot from the history panel's menu.

- Enter the snapshot's name in the Name textbox.
- Select the contents of the snapshot using the From menu:

Complete Document: selecting this option takes a snapshot of all the layers in the image at that particular moment.

Merged Layers: this choice creates a snapshot of the image that combines every layer at that particular point in time.

Current Layer: This choice creates a snapshot of the selected layer alone at that particular moment.

Work with snapshots

- Complete any of the ensuing tasks;
 - Click on a photograph to select it, or use the scale on the left of the image to move it up or down to choose a new one.
 - To give the snapshot another name, click twice on the snapshot and insert your preferred name.
 - To remove a photo, choose it, then drag it to the Delete sign, choose Delete from the panel options, or pick the Delete symbol.

Paint with a state or snapshot of an image

A copy of a picture's condition or snapshot can be painted onto the current picture window using the History Brush tool. This tool colorizes the picture or sample after duplicating it.

You could, for example, take a picture of a painting gear or a filter change (with the Complete Document option chosen). After completing the photo edit, you may carefully apply the adjustment to specific regions of the image using the History Brush tool. The History Brush tool hues on the same layer from one phase to another, unless you select a merged snapshot.

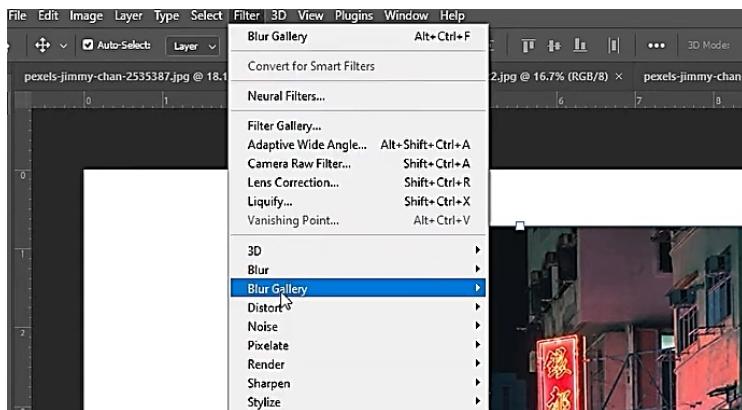
Duplicating a state or image from one region to another is possible with the History Brush tool. To produce unique effects, you can also choose to paint in Photoshop utilizing the Art History Brush tool;

- Choose the **History Brush** tool.
- In the choices bar, complete any of the subsequent tasks;
 - Declare the blend mode and opacity.
 - Make a choice of your preferred brush and configure brush options.
- To set the current circumstance or snapshot as the foundation when using the History Brush tool within the History panel, choose **the section on the left of the window**.
- Use the History Brush tool to move and add color.

Blur Gallery

Each blur tool offers on-image controls for adding and modifying the blur effect. After you've finished tweaking the blur, use the Bokeh sliders to personalize the whole blur effect. Whenever you utilize the Blur Gallery features in Photoshop, you receive a full-size, live display.

Select **Filter > Blur Gallery** and then choose your preferred effect.



Blur effects

Keeping out-of-focus or fuzzy parts under control can improve the picture as a whole. Modify the bokeh parameters to get a pleasing

overall appearance.

Within the Blur Effects panel, enter a value for the following values:

- **Light Bokeh:** This selection aids in bringing out the details in the image that are blurry or out of focus.
- **Bokeh Color:** this choice helps with the addition of more vivid color to lightened portions that are not blown out to white.
- **Light Range:** This option helps to determine the range of tones the configurations affect.

By blurring the background, you can add depth or more creative blur effects to the picture by using the **Live Gaussian Blur filter**.

Make adjustments to the image's Blur Amount and Fade Opacity, then save the outcome to either **the Current Layer or a New Layer**.

Use the Live Gaussian Blur effect to work dynamically on the canvas using brushes. Apply the filter to the canvas using the brush tools, then add or remove any blurred regions. Take into account the layer's opacity, blend modes, and panel exposure while adjusting the blur.

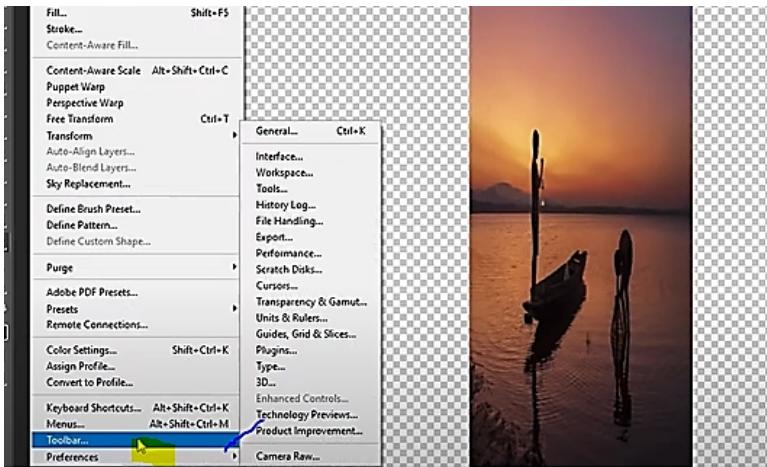
The overlay blurred image's opacity can be adjusted using the Fade Opacity slider. This is the same as choosing **Edit > Fade** after making any necessary modifications or filters.

Previewing both prior to and after the blur is possible with the Preview checkbox.

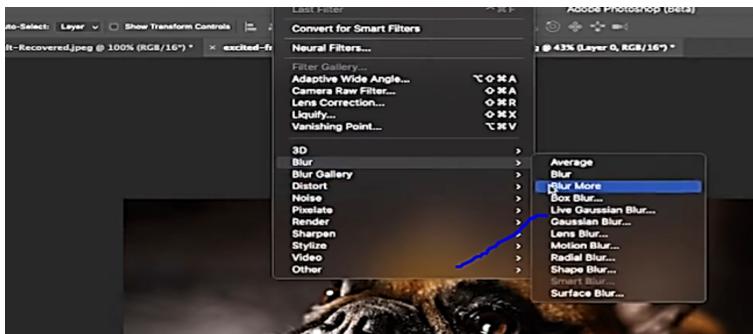
Live Gaussian Blur only blurs the image and not the transparency if the layer's visibility is locked. The filter will not blur a layer whose transparency has been locked.

Follow the instructions below to include the Live Gaussian Blur filter;

- Navigate to **Edit > Preferences > Technology Previews to allow this feature**.



- Click Filter > Blur > Live Gaussian Blur from the menu bar.



- Change the Blur Degree and Fade Opacity sliders to choose the quantity of blur you want to incorporate.
- Choose the exact place where you would have a need for the output- in a New Layer or the Current Layer.
- Check out your work with ease because the Preview option is activated. custom-wise

Restoring noise in blurred areas

Upon applying a Blur Gallery influence, you might notice that the area of the image that is blurred appears artificial or unnatural. You may apply noise or grain to a blurry photograph to make it look more realistic.

Once you are done making use of the blur controls to get the initial

effect, take the steps below to have noise restored;

- Ensure that the option that shows in the upper-right corner of the Blur Effects panel is chosen by moving the Noise tab. To bring back any noise that was originally applied to the area of the blurred image, you can easily deselect this choice at any time.
- Choose the noise kind you wish to use in the hazy area;
 - **Uniform:** This is equivalent to applying noise using the **Filter > Noise > Add Noise > Uniform** option.



- **Gaussian:** this is exactly the same as the noise applied via the **Filter > Noise > Add Noise > Gaussian** option.
- **Grain:** this is the same as the noise applied via the **Add Grain choice in Camera Raw**.
- Indicate the following configurations;
 - **Amount:** This corresponds to the quantity of noise in the portions of the picture that are not blurry. Slide the slider from 0% to 100%.
 - **Size:** Just for the grain type, helps to manage the particle size for the noise.
 - **Roughness:** Upon applying a Blur Gallery impact, you might notice that the area of the image that is blurred appears artificial or unnatural. You may apply noise or grain to a blurry photograph to make it look more

realistic.

- **Color:** The degree of coloration of the noise is adjustable using a graded slider. To achieve the same effect as the Monochromatic option in the Add Noise box (Filter > Noise > Add Noise), adjust the slider to 0% to make the noise monochromatic.

Field Blur

With many blur sites and different blur settings, Field Blur can produce a gradient of blur. Place multiple pins in the image and change the blur level of each one.

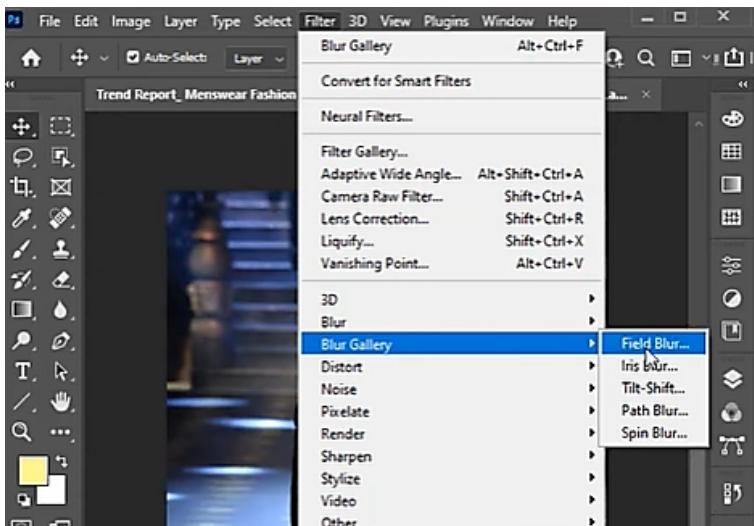
The total of all of the blur pins on the image is the final outcome. Put a pin outside the picture to create a blur around the edges.

- Select **Filter > Blur Gallery > Field Blur**. Once done, a field blur pin will then be added to the image. Choose **the image** to include more blur pins.
- Choose a pin to choose it, and then get any of the following done;
 - To raise or decrease the blur, move the blur handle. If you want to specify a blur value, you can alternatively opt to use the Blur Tools panel.
 - Move **the pin to another location**.
 - Tap **Delete** to take it off.

Iris Blur

Use iris blur to simulate the impression of shallow depth-of-field in your image, irrespective of the camera or lens that is being utilized. Not only that, but you can set several focus points, something that is almost not achievable with standard camera systems.

- Select **Filter > Blur Galley > Iris Blur**.



Once done, the default Iris blur pin will then be positioned on the image. Choose **the image** to include more blur pins.

- Move **the handles** to drag them to help with the redefining of the various aspects.
- Move **the handle** of the blur to get the blur increased or reduced. You can also choose to make use of the Blur tools panel for the identification of blur value.

Tilt-Shift

To replicate an image captured using a tilt-shift lens, utilize the Tilt-Shift effect. This unique effect blur makes a defined area first, then fades to blur at the edges. You can use the Tilt-Shift effect to help reproduce photographs of little objects.

- Select **Tilt-Shift > Blur Gallery > Filter**. Once done, the image is positioned with the typical Tilt-Shift blur pin. Select **the image to add more blur pins to**.
- To raise or decrease the blur, adjust the blur's handle. To set a blur value, you can also use the blur tools panel.
- To identify the various areas, get any of the following done;
 - To move them, move the lines.
 - Rotate and adjust the handles.

Path Blur

By disabling the Path Blur effects, you can produce motion blurs alongside routes. The blurring's form and degree can also be altered. The effects of many path blurs added to a picture are automatically combined by Photoshop.

Follow the steps underneath;

- Choose **Blur Gallery > Path Blur under Filter**.
- Under the Path Blur area of the Blur Tools screen, indicate whether you wish to apply a Basic Blur. The impact of a flash fired at the conclusion of the exposure can be replicated with the help of a Rear Sync Flash blur.
- Utilize the on-image controls in conjunction with this procedure's steps 4 through 8.
- Indicate the following configurations;

Speed: To adjust the amount of path blur you wish to add to the image, move the Speed slider. The picture's path blurs are all subject to the Speed setting.

Taper: modifies the slider to indicate a taper value. A much higher taper value enables the blur trail of bit by bit.

Deselect Centered Blur if necessary. You may have to deselect this choice if you want to add a more regulated motion blur.

By focusing the blur shape on any pixel, the Centered Blur option facilitates the development of stable blurs.

- Select the following combinations from the Motion Blur Impacts menu;

Strobe Flashes: configure the number of exposures of the virtual strobe flash light.

Strobe Strength: Assess the degree of blurring that develops between strobe flash exposures. Strobe Strength controls the ratio of ambient light to simulated strobe flashlight.

When the Strobe Strength is set to 0%, no strobe effect is generated; rather, only continuous blur is displayed. When you set the Strobe

brightness to 100%, the strobe flashes are the brightest they can be, however, there is no continuous blur presented between flash exposures. Single strobe flashes and persistent blur are produced by Intermediate Strobe Strength settings.

- Adjust the blur levels at the endpoints as needed.
- Change **the blur shape** guides if necessary. To see the instructions, select **Edit Blur Shapes**.
- Choose **OK** in the blur tool's settings bar to commit the **Path Blur effect**.

Spin Blur

The image can be rotated and blurred around one or more places by employing the Spin Blur effect. A degree of flexibility is granted to the radial blur in the spin blur. You can manipulate centered points, blur size, shape, and other variables in Photoshop while viewing a real-time preview of your changes.

Follow the steps below;

- Select **Filter > Blur Gallery > Spin Blur**
- To adjust the degree of blurring, utilize the **Blur Angle** option in the **Blur Tools panel's Spin Blur section**. You have two options for changing the angle: either enter an angle between 0 and 360°, or utilize the slider. The overlay controls also allow you to adjust the blur level.
- Select the **Motion Blur Effects tab** in the **Blur Effects panel**, then select the following configurations:

Strobe Flashes: Decide how many times to expose yourself to virtual strobe flashlights. **Strobe Strength:** Ascertain the degree of blurring observed between strobe flash exposures. The ratio of natural light to the simulated strobe illumination is controlled by the strobe strength.

Only persistent blur appears whenever the Strobe Strength is reduced to 0%, rather than producing any strobe effect. The strobe flashes are at their strongest when the strobe brightness is set to 100%, however there isn't any continuous blur between flash exposures. Single strobe flashes and persistent blur are produced by Intermediate Strobe Strength settings.

Strobe Flash Duration: This option allows you to specify the duration of a strobe light exposure in degrees. The Strobe Flash Duration adjusts the duration of the blur for each flash exposure in relation to the peripheral angular distance.

- To apply the Spin Blur effect, select **OK** from the blur tool's options bar.

Panorama

Create panoramic images with Photomerge

The Photomerge command merges multiple images into one continuous image. For example, you could capture five overlapping images of a city skyline and then stitch them together to create a panorama. Tiled images can be combined both vertically and horizontally with the Photomerge command.

Take pictures for Photomerge

In panoramic compositions, your source pictures are extremely significant. Follow these rules when taking photos to utilize with Photomerge to avoid these issues.

Overlap images sufficiently: Images ought to overlap by about 40%. If the overlap happens to be less than this, Photomerge will be unable to instantly assemble the panorama. Nevertheless, remember that the pictures should not overlap too much. If two photographs overlap by more than 70%, Photomerge will not be able to mix them together. Try to maintain the individual photos' distinctiveness from one another.

Use one focal length: if you make use of a zoom lens, keep the focal length intact while you are taking pictures.

Maintain the level of the camera: Although Photomerge can manage moderate image rotations, tilts greater than a few degrees may lead to problems when building the panorama. The usage of a tripod with a spinning head helps to maintain the camera position and viewpoint.

Remain in the same place: To ensure that all of the pictures are taken from the same angle, try to stay in one spot as you take the pictures. Maintaining a constant viewpoint can be achieved by using the optical viewfinder and keeping the camera near the

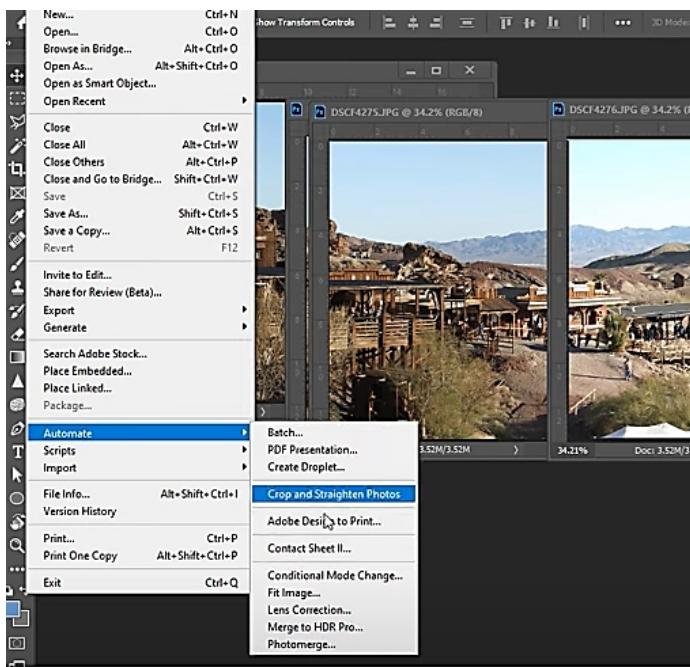
subject's eye. As an alternative, the camera can be maintained in the same location by using a tripod.

Steer clear of distortion lenses: They have a tendency to interfere with Photomerge. Still, the Auto setting is different for images captured with fish-eye lenses.

Keep the exposure constant: Don't use flash in some pictures but not in others. The blending functions of Photomerge help to even out different exposures, but too big of a difference causes alignment issues. To ensure that every shot is exposed uniformly, you might need to check your camera parameters again since some digital cameras adjust the exposure parameters while you're shooting.

Create a Photomerge composition

- Choose Photomerge under File > Automate.



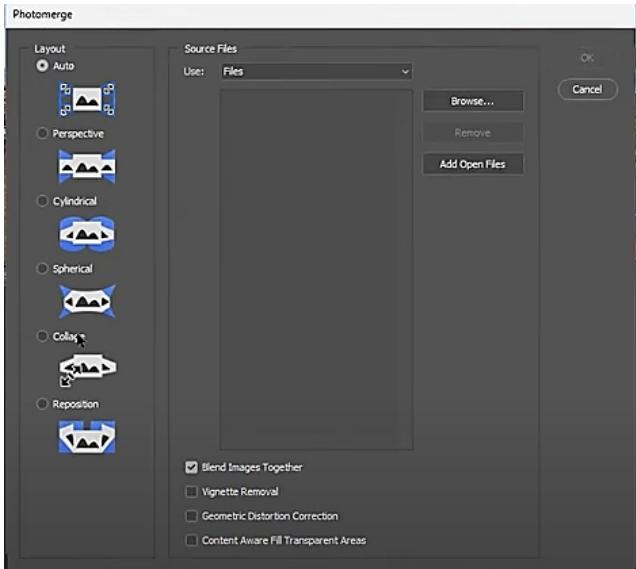
- Select any option from the **Use** menu under **Source Files** in the Photomerge dialog box;

Files: this choice helps with the generation of the Photomerge composition with the use of individual files.

Folders: To build the Photomerge composition, this option uses all of the images saved in a folder.

- Indicate which picture to employ by doing any of the following;

- Choose the **Browse** button to access the files and choose an image folder or picture files.



- To make use of images currently opened in Photoshop, choose **Add Open Files**.
 - To take off pictures from the Source File List, choose the file and select the **Remove** button.
- Choose your preferred layout choice;

To give the finest Photomerge, Auto Photoshop evaluates the original photographs and decides amongst Perspective, Cylindrical, and Spherical layouts.

Perspective chooses a reference image from among the source photos to create a composition that is consistent (the center picture by default). After that, the remaining pictures are rearranged, stretched, or warped to make room for content that overlaps between layers.

Cylindrical By displaying separate images on an unfurled cylinder,

the Perspective arrangement reduces the "bowtie" distortion that might occur. Content that spans many files is still detected. In the center is the reference image. Perfect for creating big panoramas.

Spherical Aligns and resizes images as if they were being used to map the interior of a sphere, which aids in simulating the sensation of viewing a 360-degree panorama. 360-degree panoramas can be made with a collection of 360-degree photographs. Moreover, spherical objects can be utilized to create beautiful panoramic outputs from different file sets.

Collage Aligns the layer and matches the content overlapping and also transforms any source layers.

Reposition The layers are aligned and overlapping material is matched, but no source layers are transformed.

- Select one from the following options;

Blend Images Together: Using this option, you may match the hue of the images and identify the ideal border between the photos to produce seams. By disabling the Blend Images Together option, a straightforward blend of a rectangle is produced. In the event that you need to physically retouch the blending masks, this might be preferred.

Vignette Removal: This option launches and also conducts exposure correction in images with darkening edges due by lens defects or poor lens shading.

Content-Aware Fill Transparent Areas This aids in effortlessly filling the transparent areas with neighboring image material.

- Select OK.

Photoshop blends the original photos together into just one layered picture, using layer masks as needed to achieve smooth blending in areas where the images overlap. To edit the different parts of the panorama, you can add adjustment layers or change the layer masks.

Create 360-degree panoramas

One shot can capture a 360-degree panoramic image with the Ricoh Theta V and Insta 360One cameras. In addition, Photomerge's 3D features can be used to produce 360-degree panoramic images.

After the photos are stitched collectively to form a panorama, the Spherical Panorama instruction encloses the panoramic to make it smooth.

Never forget to take pictures of a complete circle with enough overlap. Better results are obtained when utilizing a tripod and a pano head for photography.

- Choose **Photomerge** under **File > Automate**.
- Add the images that you want to use to the Photomerge dialog box. Make sure you avoid adding images that enclose the scene's top or bottom. We'll post these pictures much later.
- Select a **spherical layout**.

It is important to remember to choose Auto Layout and Geometric Distortion Correction when using a fisheye lens. If Photoshop does not immediately identify your lens, you can download the free Adobe Lens Profile Creator from Adobe's website.

- Select either **Geometric Distortion** or **Vignette Removal to adjust the lens**.
- Choose **Content-Aware**. To eliminate transparent pixels around the borders of the panoramic image, fill transparent areas.
- Choose **OK**.
- Select **Spherical Panorama** under **New Shape From Layer in 3D**.
- The top and lower photos can also be manually inserted inside the sphere. Another option is to paint over any translucent pixels that are still present in the 3D circular panorama layer.

Note that the editing and support for spherical panoramas have been terminated in this release!

Correcting image distortion and noise

About lens distortion

A lens imperfection known as barrel distortion causes straight lines to bend outward toward the picture's edges. The exact opposite phenomenon is called pincushion distortion, when the straight lines bend inward rather than outward.

Vignetting is also a defect that makes the corners of an image to be dark which usually is a result of light falloff centered around the perimeter of the lens. Chromatic aberration can be seen as a fringe in color along the object's edges which usually is a result of the lens focusing on varying colors of light in various planes.

Certain lenses show various defects at some focal lengths, f-stops, and focus distances. With the use of the Lens Correction filter, you can choose to indicate the combination of configurations employed to create the image.

Adjust perspective and correct lens distortion

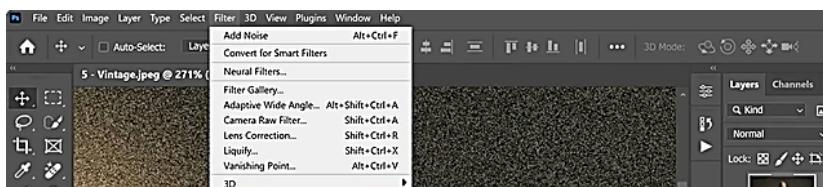
Lens correction corrects for common lens imperfections such as chromatic aberration, vignetting, and barrel and pincushion distortion. The filter supports only images in RGB or Grayscale format that have 8 or 16 bits per channel.

The filter can also be used to rotate an image or correct an image's perspective that has been thrown off by an upward or horizontal camera tilt. Compared to the Transform function, these adjustments are simpler and more accurate with the filter's picture grid.

Automatically repair picture perspective and lens defects.

The fundamental Auto Correction option quickly and accurately corrects distortion by using the attributes of the lens. Photoshop needs Exif metadata that identifies the camera and lens that were used to take the picture, as well as an appropriate lens configuration on your system, in order to do automated correction correctly.

- Choose **Lens Correction** under Filter.



- Configure the options below;

Correction makes a choice of the problem you will be fixing. If corrections get to extend in an undesirable manner or there is a

contraction of the image beyond the initial dimension, you can choose Auto Sale Image.

The Edge option lets you choose how to treat blank spaces that result from perspective, rotation, or pincushion corrections. You can choose to enlarge the pixel boundaries of the image, or you can choose to add transparency or color to the empty spaces.

Search Criteria Filters the profile list of the lens. Custom-wise, profiles are usually dependent on the image sensor size that shows first. To have a list of RAW profiles first, choose **the pop-up menu, and choose Preferred RAW profiles**.

Lens Overviews Pick a fitting profile. Photoshop only shows profiles by default that are compatible with the lens and camera that were used to take the picture. (It is not possible for the camera model to be similar.) Additionally, Photoshop will choose a sub-profile based on focus distance, f-stop, and focal length for the chosen lens. Right-click on the current lens profile and select a different sub-profile to change the automated selection.

Select **Search Online** to view additional lens profiles made by Photoshop community members if you are struggling to find a match. Select **Save Online Profile Locally** from the pop-up menu if you need to store online profiles for usage at a later time.

Manually repair image perspective and lens faults

You can add just manual correction or make use of it in the refining of automatic lens correction.

- Choose **Lens Correction under Filter**.
- Select the **Custom tab** from the dialog box's upper-right corner.
- (Optional) From the choices menu, choose from an established set of options. Lens Default employs previously stored configurations for the lens, camera, f-stop, focus distance, and focal length. The lens correction settings you last used were used during the Previous Conversion. At the bottom of the choices are any saved custom choice groups.
- Set up any of the subsequent options for the image correction;

Remove Distortion Correction is made for pincushion or lens barrel distortion. Using the slider, draw straight lines that bend in either direction toward or away from the center of the image. This can also be fixed with the Remove Distortion tool. To compensate for barrel distortion, drag toward the image's center; to compensate for pincushion distortion, drag toward the image's edge. Adjust the Edge setting on the Auto-Correction tab to make up for any blank image edges.

Fix Fringe settings make up for fringing by modifying the size of a color channel that is relative to another. Important to note is that you can enlarge the image preview to see the fringing correction process in greater detail.

Vignette Amount sets the possible amount of brightening or darkening around the edges of the image. Helps with the correction of images that have corners that are dark which can be a result of lens fault or improper shading of the lens.

Vignette Midpoint The width of the area impacted by the Amount slider is indicated here. To control more of the images, enter a much smaller number. To limit the influence to the margins of the image, indicate a much greater amount.

Horizontal Perspective helps with the correction of image perspective thereby making horizontal lines parallel.

Angle This selection aids in the image's rotation to account for the camera's tilt and then make modifications after perspective correction. You can also choose to employ the use of the straighten tool to get this correction done. Move along a line in the picture that would like to make either horizontal or vertical. Note that if you would like to avoid scaling that is unintended when modifying the perspective or angle configurations, deselect Auto Scale Image on the tab of Auto-Correction.

Scale Increases or decreases the image scale. The pixel dimensions of the image remain unchanged. The principal application involves eliminating image gaps resulting from perspective, rotation, or pincushion adjustments. When a picture is scaled up, its original pixel dimensions are interpolated and trimmed.

Modify the grid and preview of Lens Correction.

Adjust the grid lines and preview magnification to improve your ability to determine how much adjustment is required.

- Use the **Zoom tool**, or the **Zoom settings**, in the lower-left portion of the preview image, to **adjust the preview image's magnification**.
- Choose the **Hand Tool** and drag the image to reposition it within the preview windowpane.
- Select **Show Grid** at the lower part of the dialog box to utilize the grid. Modify the grid spacing using the Size control and the color of the grid using the Color option. Alternatively, you can align the grid with your image by dragging it with the grid tool.

Save settings and configure the camera and lens default

If you use the same camera, lens, and focal length in the future, you can save the Lens Correction window and its parameters. For chromatic aberration, vignetting, and distortion, Photoshop retains both Auto-Correction and Custom options. Due to their inter-image variability, perspective correction settings are not preserved.

Settings can be stored and used again in two distinct ways;

- **Keep and load settings manually.** Using the Settings menu, save your changes after adjusting your options in the dialog box. Find the Settings menu, choose the stored settings, and utilize them if necessary. If you preserve settings anywhere other than the standard folder, they will not appear in the menu; rather, utilize the Load Configuration command to get them.
- **Set a default lens.** You can preserve the current settings as a lens default if your shot contains EXIF metadata for the camera, lens, focal length, and f-stop. Press the Set Lens Standard button to save the settings. In the Settings menu, the Lens Default option shows up when you change an image to fit the camera, lens, focal length, and f-stop. If the image does not include EXIF metadata, you cannot use this option.

Reduce image noise and JPEG artifacts

Random additional pixels that are not part of the image detail can be used to represent image noise. Underexposure, using a lengthy shutter speed when recording in low light, or using a high ISO level on a digital camera can all result in noise. Cheap consumer cameras typically have more image noise than pricier ones. Image noise from the scanning sensor may be present in scanned images. The film's grain pattern can often be seen in the scanned image.

There are two categories of image noise: color noise, which appears as colorful artifacts within the image, and luminance (grayscale) noise, which causes an image to appear grainy or patchy.

It appears that luminance noise can be significantly more noticeable in one of the image's channels—typically the blue channel. In Advanced mode, you can adjust the noise separately for each channel. Prior to launching the filter, check each of the channels in your picture differently in order to observe if noise is prevalent in a channel. You also can preserve more details of the image by the correction of a channel as against making a complete correction to all of the channels available.

- Choose **Noise > Filter > Reduce Noise**.
- To get a much clearer perspective of the image noise, enlarge the preview image.
- Configure the options below;

Strength regulates the degree of luminance noise mitigation applied to all picture channels

Preserve Details The picture's edges and details, such as hair or textural elements, are kept intact. A value of 100 contributes to both the maximum preservation of visual detail and the lowest possible level of luminance noise. Adjust the **Strength and Preserve Details** parameters to achieve the ideal level of noise reduction.

Reduce Color Noise takes off random color pixels. A much higher value brings about a further reduction of color noise.

Sharpen Details aids in sharpening the picture. The clarity of the image decreases when noise is removed. For sharpness restoration, utilize the dialog box's sharpening control or one of the additional sharpening filters much later.

Remove JPEG Artifacts The blicky photo artifacts and halos that are typically removed by using this option come from saving a picture with a low JPEG quality preset.

- Select the color channel from the Channel option by using the Advanced button if luminance noise is more apparent in one or two of the channels. To cut down on noise in that channel, use the Preserve Details and Strength settings.

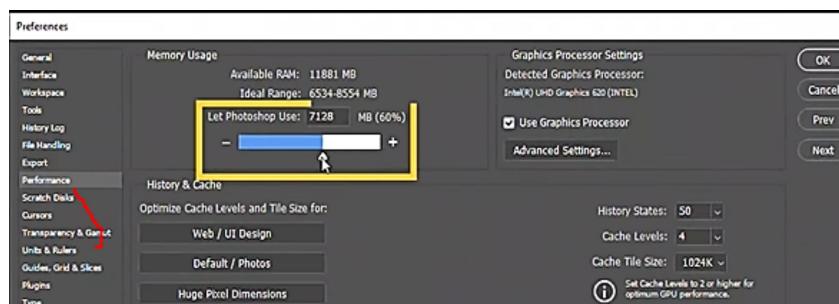
Adjusting perspective in an image

Photoshop makes it simple to change the perspective of photos. This function is very beneficial for photographs with straight lines and flat surfaces, such as architectural images and building images. This capability can also be used to blend items from diverse angles into a single image.

An object may appear differently in a photograph than it does in real life. This disparity is caused by perspective distortion. Images of the same item taken from various camera distances and points of view reveal varying degrees of perspective distortion.

In order to utilize Photoshop's perspective warp function on 16-bit and 32-bit files, you need to have no less than 512 MB of video RAM. Before you start adjusting perspective in Photoshop, make sure that the picture processor is turned on.

- Choose Performance under Edit > Preferences.



- Select Use Graphics Processor under Graphics Processor Settings.
- Choose Advanced Settings. Make sure that Use Graphics Process To Accelerate Computation is chosen.

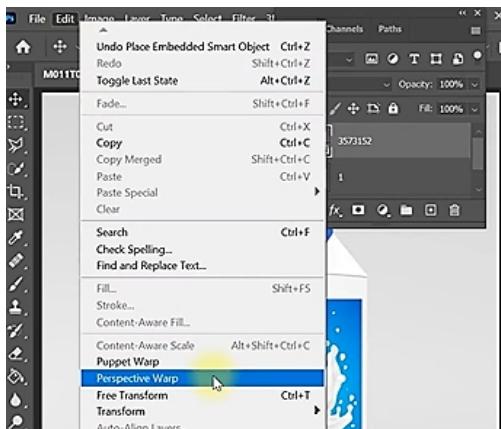
- Choose **OK**.

Adjust perspective

Define planes

A definition of the horizontal planes of the image's structure is necessary before you can adjust the perspective;

- Launch the image in Photoshop.
- Select **Perspective Warp** under **Edit**. After reviewing the on-screen advice, close it.



- Make quadruples all around the image's architectural planes. Make sure the quads' edges are perpendicular to the structure's parallel lines when you're designing them.

Manipulate the planes

- Toggle between the **Layout** and **Warp** modes.
- Manipulate perspective in any of the ways below;
 - Go around the quads' (pins') corners as needed. For example, you can crop the image to ensure that the two sides of the building are foreshortened to the same extent. With this perspective, it would feel like looking directly at the structure from a corner.
 - To straighten and keep a quad straight while changing viewpoint, shift-click its specific edge. This kind of

straightened edge is indicated in yellow when in Warp mode. You can adjust the viewpoint by shifting the quads' (pins') corners for more fine control.

- Any of the subsequent icons can be selected in Warp mode to instantly change perspective;
 - Instantly level close to the horizontal lines.
 - Instantly straighten close to the vertical lines.
 - Instantly straighten both horizontally and vertically.

When the perspective adjustment is complete, select **the Commit Perspective Warp symbol**.

The shortcuts listed below make changing viewpoint considerably simpler:

Arrow keys drags a corner of a quad (pin).

- H conceals the grid when work is being done in the Warp mode.
- L when tapped switches to the Layout mode.
- W toggles to the **Warp mode** when touched.

Enter key When in Layout mode, you have the option to swiftly transition to Warp mode by using the Enter key. When employing the Warp mode, the Enter key helps to commit the most recent alterations to the viewpoint.

Shift-click assists in aligning a single quadrant's edge and keeps it aligned while doing additional perspective adjustments. Click shift-click again if you don't need to maintain the edge's straightening.

A plane can be made much longer by using the Layout mode's shift (move an edge) function to assist limit its shape.

Activity

1. Create a snapshot.
2. Correcting a distorted image.
3. Adjust the perspective in an image.

Chapter 14

Working with Masks and Alpha Channels

A piece of an image that you select is masked, or protected from editing, in the remaining area. By creating a mask, you can alter the color, add a filter, or apply other effects to certain areas of an image while leaving other areas unaltered. More intricate image-editing activities, such as gradually incorporating color or filter effects, can also be accomplished via masks.

Masks are stored in alpha channels. Grayscale images, known as masks and channels, can be altered using the same painting, editing, and filtering tools as regular images. Sections painted black on a mask are protected, and sections painted white are modifiable.

Use Quick Mask mode to turn a selection into a temporary mask for easier editing. The Quick Mask appears as an opacity-controlled, colored overlay. You can use a filter or any painting tool to modify the Quick Mask. Upon exiting Quick Mask mode, the mask returns to its original state as an image selection.

You can preserve a selection as an alpha channel to keep it around for a longer time. In the Channels panel, the alpha channel maintains the choice as a tunable grayscale mask. After saving the selection as an alpha channel, you can use it in another picture or refresh it whenever you'd like.

Create and edit alpha channel masks

You can opt to make a new alpha channel, from which you can then make a mask using the editing, painting, and filter tools. Moreover, an existing selection within a Photoshop picture can be stored as an alpha channel that shows up in the Channels tab.

Create an alpha channel mask using current options

- Select the **New Channel** option located at the bottom of the channels screen.
- Use paint on the recently formed channel to cover over portions of the picture. Make sure you choose out portions of the image prior to the creation of the mask's channel. After

that, paint the channel to improve the mask.

Create an alpha channel mask and set options

- The Channels panel has a **New Channel button at the bottom**. You can also choose New Channel from the menu or use the keyboard shortcuts Option or Alt to click on it.
- Options should be listed in the **New Channel dialog box**.
- Image portions can be hidden away by painting on the new channel.

Edit channel options

To change the options for an already-existing channel,

- To access Channel Options, either click on the Channels panel's option or double-click the channel thumbnail. The following choices are accessible in the dialog boxes for Channel choices and New Channel:

Masked Areas Selected portions are set to white (transparent), and masked areas are set to black (opaque). The masked area is expanded by painting in black, and the selected region is expanded by painting in white. This option causes the Quick Mask toolbox button to convert to a white circle with a gray backdrop.

Selected Areas Certain portions are set to black (opaque), and masked areas are switched to white (transparent). Applying a black paint increases the specified zone, whereas applying a white paint expands the masked area. This option causes the **Quick Mask toolbox button** to transform to a gray circle with a white backdrop.

Spot Color This is useful for converting an alpha channel—which is only available for channels that already exist—to a spot color channel.

Color adjusts the mask's hue and opacity. To change the color, select the color's field. The mask's look is the only thing that is impacted by the color and opacity setup; the protection of beneath areas remains unaffected. By adjusting these settings, you can increase the mask's visibility against the image's different hues.

Paint on a channel to mask image areas

There is only one channel shown in the picture window when the new channel appears at the bottom of the Channels panel. Select the eye symbol to view the image with a color overlay that exposes the mask in the merged color channel (RGB, CMYK).

- Using a brush or other editing tool, choose an editing task to add to or remove from the mask created from the alpha channel:
 - Use white paint to remove sections of the newly created channel.
 - Apply black paint to the regions that are part of the new channel.
 - In order to incorporate or eliminate areas using opacities lower than 100%, adjust the Opacity in the painting or editing tool's options bar and apply either white or black paint. Another option is to coat with a hue to achieve significantly smaller opacities.

Save a selection to a new channel

- Select the region or sections that you want to have separated from the rest of the image.
- Select the Save Selection option by clicking the button at the bottom of the channels panel. The sequence in which it was constructed will decide its name when a unique channel manifests thereafter.

Save a selection to a new or existing channel

- Make **use of a selection tool** to choose the portion or portions of the picture you would like to have isolated.
- Choose **Save Selection > Select**.
- Select **OK** after selecting the following options in the **Save Selection dialog box**:

Document selects a picture that will become the selection's final destination. The selection is automatically positioned in a channel inside the image you are currently viewing. The selection can be stored in an entirely novel picture or in the channel of an already-

open image that has the exact same pixel dimensions.

Channel decides which channel will be the selection's final destination. By default, a new channel will be used to store the selection. Should the chosen image have layers, you have the option to preserve the selection to a channel or a layer mask.

- If you're saving the selection as a new channel, identify itself by typing a name for the channel in the text box.
- If you are saving an option to an existing channel, choose how to merge the choices;

Replace channel replaces the channel's current selection.

Add to channel This incorporates the selection into the existing channel's content.

Subtract from Channel This option removes the selection from the channel.

Intersect with Channel This selection keeps the parts of the new selection that work with the channel's programming. When you choose a channel in the Channels window, the saved selection appears in grayscale.

Mask layers

Add a mask to a layer and use it to hide parts of the layer while revealing the layers beneath.

Masking layers are useful for integrating many pictures into a single image or erasing a person or item from a photograph.

Create layer and vector masks

You can create two types of masks;

- Layer masks are resolution-dependent bitmap images that are usually modified with the use of painting or selection tools.
- Vector masks are resolution-independent and are designed with the use of a pen or shape tool.

Layer and vector masks are also non-destructive, so you can make changes to them again without wiping out the pixels they cover.

Layer and vector masks show up as an extra thumbnail in the

Layers panel, to the extreme right of the layer thumbnail.

This thumbnail displays the grayscale channel that shows when the layer mask is included. The vector mask thumbnail is a representation of the route that clips out the contents of the layer.

All you have to do is follow these instructions to design a layer or vector mask over the Background layer.

- To transform your Background layer to a normal layer, select **Layer > New > Layer from Background**.
- To add a Layer Mask, use the **Add Layer Mask symbol** located at the bottom of the Layers panel.
- When making changes to your composite, utilize the Density and Feather slider.

A layer mask can have its masked area added to or removed from. Typically, a grayscale image serves as a layer mask. The regions painted in shades of gray will be shown in varying degrees of transparency, the areas painted in black will be hidden, and the areas painted in white will be dazzling.

A vector mask on a layer provides you with a form with sharp edges when you want to build a design element with exact edges. A layer developed with a vector mask can have several layer styles applied to it, updated as needed, and then you have a working button, panel, or another web design element right away.

The Properties panel offers further mask adjustment settings. Similar to a selection region, you can flip a mask, adjust the mask borders, and change the opacity of a mask to allow some or all of the masked material to show through.

Add layer masks

A layer mask gives you the option to either show or hide every layer, or to base the mask on a transparency or selection. Later on, you'll paint over the mask to reveal the layers underlying by selectively hiding certain parts of the layer.

Add a mask to reveal or conceal the entire layer.

- Make sure that no portion of your photo is selected. Choose **Select and then Deselect**.
- Select **the group or layer** from the layers panel.

- Get any of the following done;
 - After clicking the **Add Layer Mask** button, choose **Layer > Layer Mask > Reveal All** within the window featuring layers to create a mask that completely reveals a layer.
 - Choose **Layer > Layer Mask > Hide All**, or **Alt-click the Add Layer Mask button (Macintosh) or Option-click (Windows)** to create a mask that covers the entire layer.

Utilize a layer mask to partially conceal a layer.

- In the panel containing layers, choose **the layer or group**.
- Choose the part in the image, and get any of the following done;
 - In the Layers panel, choose the **New Layer Mask choice to generate a mask that shows the selection**.
 - In the Layers panel, **Alt-click or Option-click the Add Layer Mask icon to create a mask that obscures the selection**.
 - Select either **Hide Selection or Reveal Selection under Layer > Layer Mask**.

If you would like to edit layer transparency in a direct manner, get any of the following done and create a mask;

- In the panel containing layers, choose **the layer**.
- To access the Layer Mask, select **Layer > From Transparency**.

Photoshop converts transparency to an opaque hue that is hidden by the freshly made mask. The opaque hue changes a lot based on the filters and additional processes that were already added to the layer. This method works well for processing videos and 3D content.

Separate the masks and layers

The connection icon in the Layers panel between the thumbnails indicates that a group or layer is connected by default to its vector

mask or layer mask. You can employ the Move tool to shift the layer and the mask it contains around the image in unison. You can move them independently and unlink them to modify the mask's bounds without impacting the layer.

- Selecting a layer's link symbol from the Layers panel will unlink it from its mask.
- In the layer panel, pick the thumbnail of the layer and mask path to restore the link between the layer and its mask.

Apply or delete a layer mask

A layer mask can be used to permanently erase the hidden areas of a layer. Because layer masks are saved as alpha channels, using and deleting them can assist in minimizing file size. You can also erase a layer mask without making any modifications to it.

- Navigate to the panels containing layers, and choose the layer that has the layer mask.
- Get any of the following done;
 - After applying the layer mask completely to the layer, use the **Apply Mask** icon located in the Properties panel's lower section to remove it.
 - The layer mask can be removed without having to be added to the layer by selecting the **Delete** button at the bottom of the Properties dialog box and choosing **Delete**.

You can also choose to add or delete layer masks with the use of the Layer menu.

Choose and then show the layer mask channel.

The grayscale mask can be shown as a layer overlay or as a rubylith, which makes changing the mask's layer easier.

- In the panel containing layers, get any of the following done;
 - To examine only the grayscale mask, use **Alt** or **Option** to click the layer mask thumbnail. Click the thumbnail of the layer mask with **Alt** or **Option** to restore the layers. Alternatively, on the Properties panel, click the eye icon.

- Hold down Alt+Shift or Option+Shift while selecting the layer mask thumbnail to see the layer mask using the Rubylith masking color on top of the layer. To dismiss the color display while clicking the thumbnail, hold down the Alt or Option.

Modify the opacity of a chosen layer or vector mask using the Properties panel. The opacity of the mask can be changed using the Density slider. Using a feather, you can make the borders of your mask softer.

Only layer masks are affected by other parameters. The masked and unmasked elements' positions are switched around with the Invert option. Smooth and Contract/Expand are two of the parameters available in the Mask Edge option for changing the mask edges.

Manipulating with Puppet Warp

The Puppet Warp has a visual mesh that allows you to warp specific image sections while leaving others untouched. Applications range from minor image retouching (like hair shaping) to complete transformations (like moving arms or legs).

Puppet Warp may be applied on layer and vector masks in addition to picture layers. Smart Objects can be used to distort images without causing them to be destroyed.

- In the panel containing layers, choose your preferred layer or mask that you would like to transform.
- Click on **Edit > Puppet Warp**.
- In the options bar, modify the following mesh configurations;

Mode This choice helps to determine the overall elasticity of the mesh.

Density this choice helps to determine the spacing of the mesh points. More points get increased with precision but need more time for processing; fewer points get to do the direct opposite.

Expansion here is either an expansion or contraction of the mesh's outer edge.

Show Mesh to see a clearer glimpse of your transformations, deselect to reveal only the adjustment pins.

- Select the areas you want to hold in place and the portions you want to change by pinning them to the respective locations in the image window.
- Make any of the subsequent arrangements in order to remove pins or change their placement;
 - Move pins to warp the mesh.
 - In the settings bar, select the **Pin Depth buttons** to display a mesh piece that you have covered with another one.
 - Choose **Delete** to delete the pins you've chosen. To eliminate further individual pins, precisely position the cursor over the pins and click Alt or Option to view the scissors symbol.
 - In the options menu, select the button labeled **Remove All Pins**.
- Select a pin, then perform one of the following actions to spin the mesh around it;
 - To rotate the mesh by a specified number of degrees and move the cursor in the direction of the pins—not over them—press Alt or Option. You may visually rotate the mesh by moving when you observe a circle.
 - For instantaneous mesh rotation based on the specified Mode choice, choose **Auto** from the **Rotate option in the options bar**.
- When the transformation is completed, tap the **Enter** or **Return** button.

Activity

1. What are mask layers?
2. Add a layer mask to an image in your file.
3. Modify any of your pictures with the use of the Puppet Warp tool.

Chapter 15

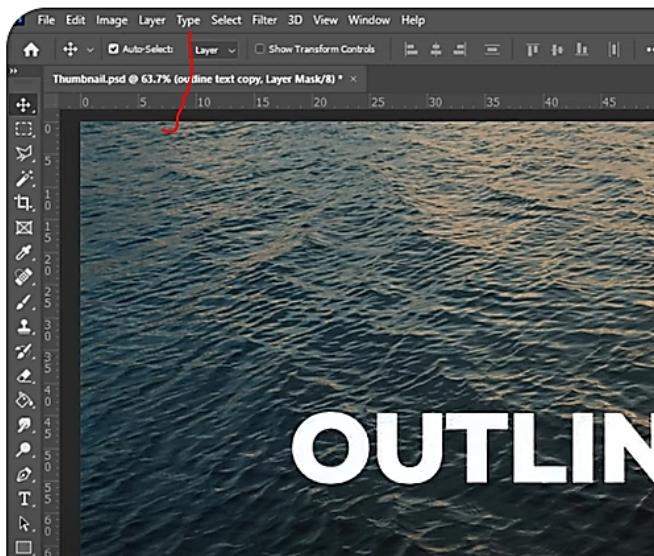
About Type

Adobe Photoshop's type is made up of vector-based type outlines, which are mathematically defined forms that characterize the letters, numerals, and symbols of a typeface. Many fonts are available in multiple formats, with the most common being Type 1 (commonly known as PostScript fonts), TrueType, OpenType, New CID, and CID non-protected (Japanese only).

Photoshop stores and uses vector-based type outlines when you resize or edit the type, save an EPS or PDF file, or print the picture to a PostScript printer. This makes it possible to create a type that has crisp, resolution-independent edges.

Take note that if you import bitmap layers created with Photoshop Elements or earlier versions of Photoshop,

- To convert to vector type, choose **Type > Update All Text Layers**.



A novel type of layer shows up in the Layers window each time you create a new type. Once created, a type layer can be altered and

utilized with layer commands.

Photoshop converts vector-based type outlines into pixels when you make rasterization-related changes to a type layer. Rasterized type can no longer be manipulated as type and has lost its vector outlines.

The following modifications can be made to a type layer and you will still be able to edit the type;

- Modify the type's orientation.
- Enhance anti-aliasing
- Change the format from point to paragraph.
- Create a work route based on the type
- Add commands for transformations (apart from Perspective and Distort) from the Edit menu.
- Use layer styles.
- Make use of fill shortcuts.
- Warp type in order to have a confirmation with a diverse shape.

Entering type

Type can be generated at a location, inside a paragraph, or along a path. These are the three main methods.

- Point type is defined as a text line that starts exactly where you specify in the image, either vertically or horizontally. One extremely helpful technique to integrate a few sentences in your image is to insert text at a spot.
- In paragraph type, boundaries are employed to manage the text's flow, both horizontally and vertically. This method of text inserting is quite useful, especially when creating a brochure or other document that requires one or more paragraphs.
- When a path crosses either a closed or open path, enter text there. The letter will be placed parallel to the baseline for the whole journey when you type horizontally. Vertically inserted text will have characters that line up with the path's baseline. As the points were incorporated into the path in each case, the text will read in the same manner.

The handle in the corner of the border or the anchor point at the

final point of the path will be substituted by a little box or circle with the plus sign (+) when you add more text than can be accommodated inside a paragraph boundary or in a path.

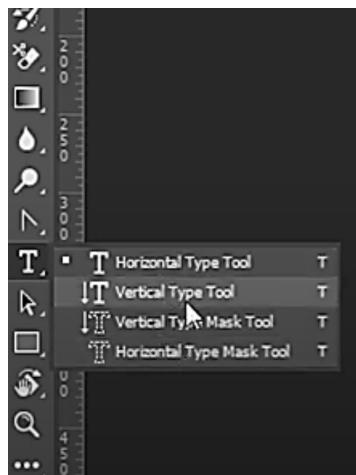
When you use the type tool to choose an image, it enters edit mode. Characters can be entered and changed while the tool is currently in editorial mode. Some tasks require you to submit changes to the type layer beforehand, but you can still accomplish other tasks from the menus. The edit mode of the type tool is indicated by the presence of the **Commit** and **Cancel** icons in the options bar. By examining it, this can be ascertained.

Enter paragraph type

When you insert paragraph type, the type lines wrap to meet the bounding box's dimensions. You can input a number of paragraphs and choose a paragraph justification choice.

If you change the bounding box's size, the type will reflow inside the updated rectangle. Once the type layer has been produced, or while you are typing, you can choose to modify the bounding box. The bounding box can also be used to skew, resize, and rotate text.

- Select from the **Vertical Type** and **Horizontal Type tools**.



- Get any of the following done;
 - Draw a bounding box definition for the type by dragging diagonally.

- Press and hold Option or Alt to bring up the Paragraph Text Size window when you select to move. **Enter the Width and Height values, then select OK.**
- The Character panel, Paragraph panel, **Layer > Type submenu**, and options bar all offer more type settings.
- Put the characters in. Press **Return (Mac OS) or Enter (Windows)** to begin a new paragraph. The overflow sign will appear in the bounding box if you input more types than it can hold.
- If need be, change the size, rotate, get the bounding box skewed.
- Get the layer type committed by getting any of the following done;
 - In the options bar, select the Commit button.
 - On the numerical keypad, press the **Enter key**.
 - Tap **Ctrl + Enter (Windows) or Command + Return (Mac OS)**.
 - Choose any tool from the toolbox, any menu item that is accessible, or a panel item from **Layers, Channels, Paths, Actions, History, or Styles**.

Change the size or shape of a type bounding box.

- Show the handles of the paragraph type enclosing box. Utilizing the Type tool, choose the type layer within the panel of layers, and then touch on the text flow within the image.
 - The pointer will transform into a double arrow and then drag to change the bounding box's size when it is positioned over a handle. Use shift-drag to maintain the bounding box's dimensions.
 - Position the pointer beyond the bounding border to rotate the bounding box; it will then transform into a curved, two-sided arrow that you may drag. To limit the rotation to 15-degree increments, shift-drag. Move the middle point with the keyboard shortcut **Ctrl-drag (Windows) or Command-drag (Mac OS)** to change the

rotation's center. The center point could lie outside the boundaries of the box.

- **Holding down the Ctrl or Command keys** while moving one of the center handles will skew the bounding box. After that, the pointer will turn into an arrowhead.
- To scale the type, use Ctrl-drag or Command-drag to drag the corner of a handle to change the enclosing box's size.
- **Drag the handle or a corner to alter the size of the bounding box starting at the center (Windows: Alt-drag, Mac OS: Option-drag).**

Convert between point type and paragraph type

To modify the character flow inside a bounding box, alter the point type to paragraph type conversion. You can also change the text type from paragraph to point so that each line flows separately from the others. Every line of text (except from the final line) has a carriage return attached to the end when changing from paragraph to point type.

- Choose **the type layer** in the panel containing layers.
- Click on **Type > Convert To Point or Type > Convert To Paragraph Text.**

Any characters that protrude beyond the bounding box are eliminated when you transform a paragraph to point type. Before converting, make sure that all kinds are observable by adjusting the bounding box.

Creating type on a path

The type can have different looks depending on the operations you apply to it. For instance, you can apply a drop shadow on type, distort type, and convert type to forms. To create type effects, one of the simplest methods is to use the Photoshop Text Effects techniques on a type layer. Click the **Actions panel option and choose Text Effects to get these effects.**

You can type text along a work path's edge if it was created with a pen or form tool. The anchor points of a path are entered along the path in the manner in which the type flows. When horizontal type is inserted on a path, the resultant letters are parallel to the baseline. Typing vertically in path typing aligns the text perpendicular to the baseline.

In a closed path, type can also be entered. Here, on the other hand, the type is perpetually horizontal, breaking into lines whenever it approaches route limits.

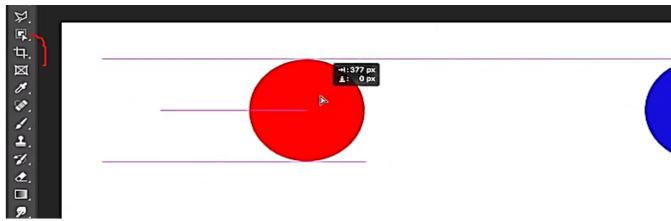
Insert type along a path

- Do any of the following:
 - Either select the **Vertical Type tool** or the **Horizontal Type tool**.
 - Select the tool that you want to use: The **Vertical Type Mask** or the **Horizontal Type Mask**.
- Click after positioning the pointer such that the type tool's baseline indicator is on the route. When you have finished clicking, the path will show an insertion point.
- **Insert the type.** Along the path, a horizontal type that is parallel to the baseline will be shown. Along the journey, vertical lines paralleling the baseline will also be displayed.

It is important to note that by utilizing the Baseline Shift choice in the Character panel, you may be able to regulate the vertical placement of text on a path with more precision. Enter a negative integer to make the font smaller in the Baseline Shift text box.

Sort or move along a path.

- Place the tool of your choice—**Direct Selection** or **Path Selection**—over the text. After that, the pointer will transform into an arrow-equipped I-beam.



- Select **the type** and drag it **along** the path to drag text. Please take care not to cross the route.
- Choose and drag **the type** over the route to switch text to the opposite side of the road.

Use the Baseline Shift option in the Character panel to move a type over a path without altering its direction. You can remove a type that, for example, spans a circle from one side to the other by entering a negative number in the Baseline Shift text area.

Put type inside a path that is closed

- Select the tool for Horizontal Type.
- Insert the pointer into the route.
- Select Insert Text once dashed parentheses have encircled the type tool.

Move a path with type

- Using either the Path Selection or Relocate tool, choose and move **the path to another location**. If, during the use of the Path selection tool, the pointer does not become an arrowed I-beam, you will have to drag the type through the path.

Using type, alter a path's shape

- Pick the tool for **Direct Selection**.
- Choose an anchor point along the path and then adjust the path's shape with the handles.

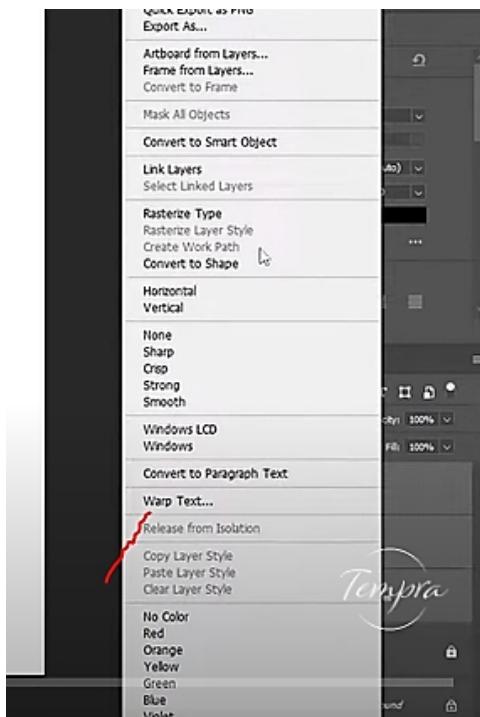
Variety of warp and un warp

Warp type can be used to create a unique type effect. You can warp type into looking like an arc or a wave, for example. The warp style that you select determines the characteristics of the layer type; you can alter a layer's warp style at any time to alter the warp's overall

shape. You can adjust the angle and direction of the warp impact with the warping options.

Warp type

- Choose a type layer.
- Get any of the following done;
 - Select the type tool, then click the **Warp icon** in the toolbar.
 - Click **Warp Text under Type**.



- Select a warp style using the pop-up Style menu.
- Select whether the warp effect is horizontal or vertical.
- If need be, indicate the values for more warping choices;
 - Bend to indicate just how much warp is added to the layer.

- Use either vertical or horizontal distortion to give the warp perspective.

Unwarp type

- Select a layer of type that has been warped.
- Select Layer > Type > Warp Text with your preferred type tool, or select the Warp button in the option bar.
- Select the Style option that says None and click OK.

Make a work path based on the type

Type can be used as vector shapes once they have been transformed into a work path. A work path is an improvised path in the Paths window that displays the contour of a form. Created from a type layer, a work path can be saved and handled just like any other path. Characters in the path are unable to be modified as text, although the initial type layer can still be edited.

- Select Type > Create Work Path after selecting a type layer.

Transform type into shapes

A vector mask layer takes the place of the type layer whenever you transform type to form. The text within the layer cannot be altered, but you can add styles and modify the vector mask.

- Choose a type layer, and pick Type > Convert To Shape.

Create a type selection border

The Horizontal Type Mask and Vertical Type Mask tools allow you to select within the shape of the type. Type choices have the same fill, stroke, drag, and copy properties as other selections. On the active layer, they are likewise visible.

- To make the selection appear on that layer, pick it. To achieve the best results, design the type selection boundary on an ordinary picture layer rather than a type layer. If you need to fill in or stroke the type selection border, start with a new, blank layer.
- Choose either the Vertical Type Mask tool or the Horizontal Type Mask tool.

- Choose additional type options before adding text to a point or a bounding box. You will see a red mask over the active layer while you type. Pressing the **Commit button** will cause the type selection boundary to appear in the image on the current layer.

Add a drop shadow to text

To provide depth to text in an image, use a drop shadow;

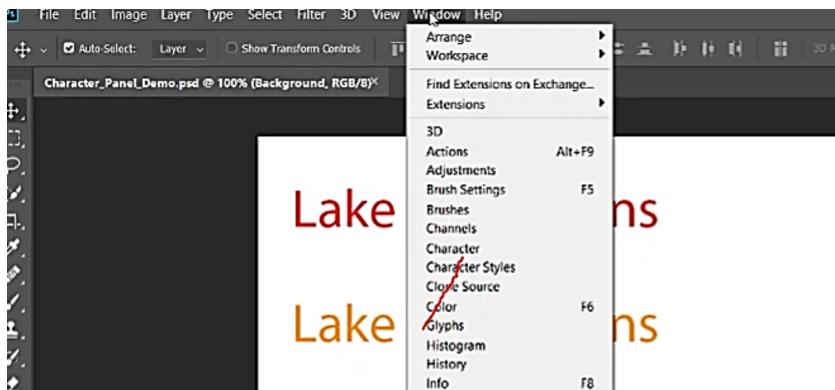
- From the Layers panel, choose **the text layer** that has a drop shadow applied to it.
- Select **Drop Shadow among** the list that appears after selecting the Layer Style icon located at the bottom of the layers panel.
- If possible, place the **Layer Style dialog box** in such a way that you are able to have a view of both the layer as well as its drop shadow.
- Adjust the parameters to your personal taste. The way the shadow mixes in with the layers behind it, its opacity, the direction of the light, and how far it is from the object or the text are all adjustable.
- When you are content with the drop shadow, choose **OK**.

Fill type with an image

Insert a picture within the type.

You can fill the text with an image by using a clipping mask on a picture layer that is placed over a type layer in the layers panel.

- Open the file that contains the image you wish to include in the text.
- In the toolbox, select the **Horizontal Type or Vertical Type tools**.
- Select the **Character tab**, or select **Window > Character** if the panel isn't accessible, to move the Character window to the front.



- In the Character panel, choose the text's font and additional type characteristics. It is best to utilize thick, bold, and huge lettering.
- Click an insertion point to add text to the document window. Once you're finished, hit Command + Return on Mac OS or Ctrl + Enter on Windows.
- If the Layers panel is not open, choose **Windows > Layers**. Alternatively, press the Layers tab to bring the Layers window to the front.
- (Optional) Double-click **the image layer** in the Layers panel to change its background layer status to normal. This will only happen if the image layer is the background layer.
- (Selective) Using the New Layer dialog box, rename the layer. After closing the dialog box, click **OK** to transform the image layer.
- In the Layers panel, drag the image layer to the right side of the type layer.
- When the image layer is selected, choose **Layer > Create Clipping Mask**. The picture is incorporated into the text.
- To move the image inside the text, choose the **Move tool** and drag it.

Activity

1. What does “type” mean?
2. Create a type on a path.
3. Warp and unwarp type.

Chapter 16

Bitmap Images and Vector Graphics

Understanding the essential distinctions between bitmap pictures and vector graphics—the two main categories of computer graphics—is essential before working with vector shapes and vector pathways. Both bitmap and vector information can be combined into just one Photoshop image file; Photoshop is capable of handling both kinds of graphics.

A grid of dots called pixels makes up bitmap images, sometimes referred to as raster images. Every pixel is distinct in both its location and color value. With bitmap graphics, you work with groups of pixels instead of objects or shapes. Bitmap graphics can communicate fine gradations of hue and shadow, which makes them ideal for continuous-tone images such as photographs or artwork created in painting apps. One drawback of bitmap graphics is that their pixel count is fixed. Consequently, they may become jagged and lose information when enlarged on screen or published at a lower resolution than intended.

Vector graphics are composed of lines and curves that are specified by mathematical concepts known as vectors. These visuals retain their sharpness even after being moved, enlarged, or colored. Vector graphics are excellent for images, typography, and graphics that can be scaled to multiple sizes, such as logos.

About paths

The outline of a vector shape is referred to as a path in Photoshop. A route is a curved or straight line segment that you create with the Pen, Freeform Pen, Curvature Pen, or shape tools. The Pen and Curvature Pen tools make precise routes; shape tools create rectangles, ellipses, and other shape paths; and the Freeform Pen tool creates paths as if you were writing with a pen on paper.

Paths can be open or closed at any time. A wavy line is an example of an open path with two unique endpoints. A continuous path is a closed path (such as a circle). The path you create has an impact on how it can be picked and altered.

A path, unlike pixels formed by the painting tools, does not generate a printed mark on its own. Because a path is similar to a selection marquee in vector form, you can use it to mark a region of

a layer with pixels by applying a fill (color, pattern, or other content) or a stroke (outline). Create a path as a shape to utilize it as a vector object that you may fill, stroke, print, export, and continue to edit as a vector object.

Draw with the Pen tools

Photoshop offers various Pen tools, designed to suit your taste and creative style;

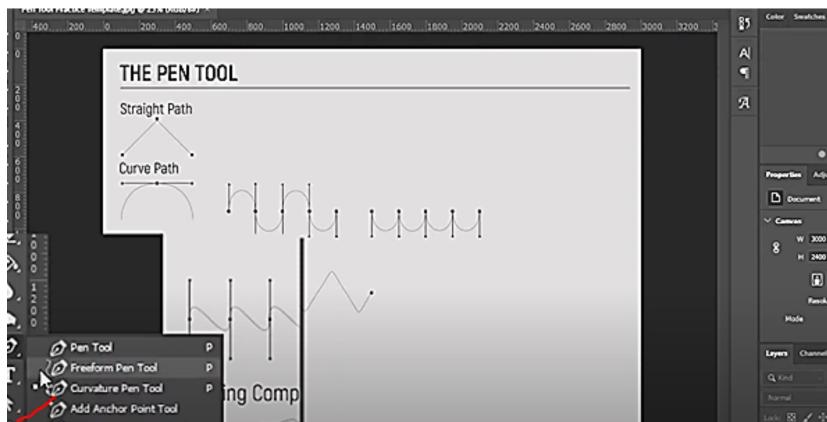
- The Curvature Pen tool enables you to intuitively draw curves and straight segments.
- The standard Pen tool allows you to efficiently and precisely draw curves and straight segments.
- With the use of a pencil and paper, you can draw pathways using the Freeform Pen tool.
- Utilizing the Magnetic Pen settings, you can make a path that snaps into the limits of the selected areas in your image.

The Pen tool and the shape tools can be used to construct complex shapes. Note that prior to utilizing the Pen tool to begin sketching, make sure you establish a fresh path in the Paths window so that you may save the work path as a named path immediately.

Curvature Pen tool

Utilizing the Curvature Pen tool, drawing smooth curves and straight line segments is a breeze. With this simple tool, you may create exact paths to improve your photographs or rapidly add custom forms to your projects. You can do this by creating, toggling, modifying, or deleting edge or smooth points without switching tools.

- Navigate to the group of the **Pen tools**, and choose the **Curvature Pen tool**.



- Select or touch **any section of the document** to design the initial anchor point.
- Select or touch **once again** to create the second anchor point, completing the first portion of the path. To apply a curve to the next path segment, click **once (by default)**. To create a line segment close to it, click that **twice**.

Remember that the first portion of your path will always show up as a single line on the canvas. Depending if you build a straight or curved part next, Photoshop will alter the portion significantly later. If you design a curved part after the first, Photoshop will adjust the curvature of the first segment so that it is smoother in relation to the next segment.

- (Curved path) Moving the pointer with a mouse as well as a touch-enabled gadget will allow you to sketch the next segment of your path. Press and hold the mouse button to adjust the segment's curvature. Promptly changing the preceding part preserves the seamless curvature.
- (Curved path) The second segment can be accomplished by releasing the mouse button and dropping the anchor point.
- Draw more segments and get the path completed.
- When you are through drawing, tap the **Esc key**.

The following tips should be noted when working with the curvature pen tool;

- To create a curve in the following leg of your path, click

once after releasing an anchor point. To construct a straight segment next, double-click. Photoshop may smooth points and generate corners as needed.

- Double-clicking **on a smooth anchor point** will turn it into an edge point or vice versa.
- To move an anchor point, just drag it around.
- Click **the anchor point and press the Delete key to remove it**. Even if the anchor point is removed, the curve is still preserved and altered appropriately in relation to the remaining anchor points.
- Use an anchor point to drag the curvature to change. The neighboring path segments will also adjust when you make this kind of change to one path segment (rubber-band effect).
- To add an extra anchor point, simply hit the center of the path section.

Pen tool

Draw straight line segment

When you choose the Pen tool to generate two anchor points, the simplest path that can be constructed with the regular pen tool is a straight line. As you keep clicking, a path composed of straight-line segments joined by corner points is created.

- Choose the **Pen tool**.
- Place the Pen tool just where you would like the straight segment to commence, and select to define the first anchor point (ensure you do not drag).

You will not see the first segment you sketch until you click on the second anchor point. To see path segments in advance, select the **Rubber Band option**. You accidentally moved the Pen tool; if you observe direction lines, select **Edit > Undo** and **click again**.

- Choose again where you would like the segment to come to an end (Shift-click to have a constraint on the angle of the segment to a multiple of 45 degrees).
- Continue selecting anchor points for longer, straighter segments. Your final anchor point will always appear as a solid square, indicating that it has been selected. As you add more anchor points, previously established anchor points will

become hollow and deselected.

- To complete the path, get any of the following done;
 - Over the initial (hollow) anchor point, position the Pen tool to close the route. A small circle shows next to the Pen tool cursor when it is positioned correctly. You can **click or drag the path to end it**.
 - To keep the path open, **Ctrl-click (Windows)** or **Command-click (Mac OS)** anyplace away from all items.
 - To ensure that the path is left open, you can also choose **another tool**.

Draw curves with the Pen tool

A curve is created by dragging the curve's defining direction lines and adding an anchor point at the curve's direction change. The direction lines' length and inclination define the curve's shape.

Curves are easier to modify and your system can display and print them more quickly when you draw them with the fewest anchor points possible. An excessive number of points on a curve may also result in unwanted bumps. Instead, draw widely spaced anchor points, and then work on forming curves by adjusting the direction lines' lengths and angles.

- Choose the **Pen tool**.
- Holding down the mouse button, position **the Pen tool** where you want the curve to start. Upon displaying the initial anchor point, an arrowhead will appear in place of the Pen tool cursor. Keep in mind that the point will just adjust once you begin dragging in Photoshop.
- Make the necessary movements to adjust the curve segment's slope, and then release the mouse button. Usually, you want to extend the direction line by around one-third of its length to the subsequent anchor point you intend to draw. One or both of the direction line's sides can be changed at a far later time. Lock the tool to multiples of 45 degrees by pressing the Shift key.

- After positioning the Pen tool wherever you want the curve part to finish, you can perform any of the subsequent actions;
 - For the creation of a **C-shaped curve**, move in a direction that is opposite to the former direction line. Then let go of the button of the mouse.
 - To make an **S-shaped curve**, move in the exact same direction as the former direction line then let go of the button of the mouse.

The direction point can be swiftly moved along the path of the curve by Alt- or Option-dragging after the mouse button is released. Release both the Alt and Option keys in order to finish the curve segment. After that, drag in the other way to reach the segment's desired end.

- Continue dragging the Pen tool in different directions to produce a sequence of rounded shapes. Be aware that you are placing anchor points at the beginning and conclusion of each curve rather than at the curve's tip.
- Finish the path by completing one of the tasks listed below;
 - Click and move the **Pen tool across** the initial anchor point to seal the path.
 - To keep the path open, choose **a different tool or Ctrl-click (Windows) or Command-click (Mac OS)** anywhere that is not in close proximity to any items.

Draw a pair of curving sections joined by a corner.

- Move to construct a curved segment's first smooth point with the Pen tool.
- To modify the slope of the next curve, drag the direction line toward its opposite end by tapping and holding Alt (Windows) or Option (Mac OS) after adjusting the Pen tool's position and movement to form a curve with a second smooth point. Release the mouse button and the key. By dividing the direction lines, this procedure aids in the transformation of the smooth point into a corner point.
- To finish the second curved segment, move a new smooth point to the desired location once you have adjusted the Pen

tool's position.

Finish drawing a path

- Finalize a path in any of the following ways;
 - Put the **Pen tool** over the first anchor point to close a route. When the **Pen tool** is positioned correctly, a small circle will appear near the cursor. To shut the passage, choose or move.
 - To ensure a path is left open, **Ctrl-click (Windows)** or **Command-click (Mac OS)** anywhere away from all objects.

Freeform Pen tool

The Freeform Pen tool allows you to sketch as if you were using a pencil and paper. As you sketch, anchor points are automatically inserted. You don't get to choose where the points go, but you can change them after the path is finished. Use the Pen tool to draw with finer precision.

- Choose the **Freeform Pen tool**.
- Select the inverted arrow next to the shape buttons in the choices bar, then enter a **value for Curve Fit between 0.5 and 10.0 pixels** to adjust how responsive the last route is to mouse or stylus movements. A path with fewer anchor points and a simpler design will result in a significantly higher value.
- Move the cursor in the image. As you move, a path will trail behind the cursor. When you let go of the mouse, a work path will then be created.
- To proceed with the freehand path, place the Pen pointer on an endpoint of the path then move.
- Release the mouse to finish the path. Drag the line to the path's starting point in order to create a closed path. Once the pointer is properly aligned, a circle will appear near it.

Draw with the use of the magnetic pen options

You can create a line that clings to the edges of specific areas in

your image by using the Magnetic Pen Freeform Pen tool option. You can adjust the snapping behavior's range and sensitivity as well as the path's intricacy. Many of the choices are similar between the Magnetic Lasso and Magnetic Pen instruments.

- To go from the Freeform Pen tool to the Magnetic Pen tool, select Magnetic from the options bar, or select Magnetic by selecting the inverted arrow next to the shape buttons, then set up the following parameters:
 - Enter a **pixel value between 1 and 256 for Width**. The Magnetic Pen only recognizes edges within a certain distance of the pointer.
 - To define the minimum contrast between pixels for an area to be considered an edge, enter a **percentage value between 1 and 100 for Contrast**. In photographs with little contrast, raise the value.
 - Enter a **number between 0 and 100 for Frequency to control the rate at which the Pen sets anchor points**. A greater number immediately anchors the path in place.
 - If you're utilizing a stylus tablet, choose to activate or deactivate Pen Pressure. The width gets smaller when you apply more pen pressure when this choice is activated.
- Select the image to configure the first fastening point.
- Move the pointer or get going in line with the edge you want to trace to create a freehand segment. The border's most recent section will remain operational. The active section will snap to the image's strongest edge as you move the mouse, connecting the pointer to the final attaching point. To anchor the previous parts, the Magnetic Pen periodically adds attaching points to the border.
- Choose once to manually add a fastening point and make sure the border keeps moving if it doesn't snap to the specified edge. Keep on tracing the edge and including fastening points as the need arises. If for one reason or the other you happen to miss some steps, touch **Delete** to take off the last fastening

point.

- To dynamically alter the properties of the Magnetic Pen, get any of the following done;
 - **Alt-drag (Windows) or Option-drag (Mac OS)** to draw a freehand path.
 - **Alt-click (Windows) or Option-click (Mac OS)** to create straight segments.
 - Press the **open-ended square bracket key ([])** to make the Magnetic Pen narrower by one pixel, and press the **close square bracket button (])** to make the pen wider by one pixel.
- Finish the path;
 - To close an open path, use **Enter on Windows or Return on Mac OS**.
 - To use a magnetic section to close the path, click **twice**.
 - To end the path with a single segment, select **twice while pressing down Alt or Option**.

Activity

1. What are bitmap images and vector graphics?
2. What does the word “path” mean in Photoshop?
3. Draw a line and curve with the use of the pen tool. Use other types of the pen tool to also make some drawings.

Chapter 17

Arranging layers

Several layers can be combined to create complex composites. Photoshop allows you to work with multiple layers as a single object by stacking them and moving them around efficiently. To avoid accidental edits to your work, lock a layer.

Alter the order of layers and layer groups

If you would like to order layers and layers groups, do any of the following;

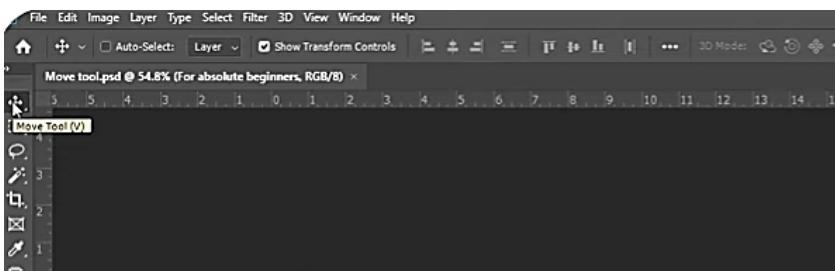
- In the panel that contains layers, nudge the layer or group up or down. Let go of the mouse button when the desired placement of the chosen layer or group is shown by a highlighted line.
- A layer can be dragged to the collection folder in order to be included in the group. The layer will consequently be placed towards the end of the collection if it is closed.
- Go to **Layer > Arrange**, choose a group or layer, and then click **on an instruction from the submenu**. If your chosen item is included in the group, this instruction will be applied to the arranging order within the group. The command will be implemented in the stacking order of the layer-containing panel if the selected item is not a member of a group.
- To reorder the chosen layers, choose **Layer > Arrange > Reverse**. These choices will seem boring if you don't have at least two layers selected.

By definition, the background layer is positioned towards the bottom of every arranging sequence. Consequently, the selected object is positioned directly above the backdrop layer by the **Send To Back** command.

Move to the content of layers

- Select the layers containing the objects you want to transfer from the Layers panel.

- Choose the **Move tool**.



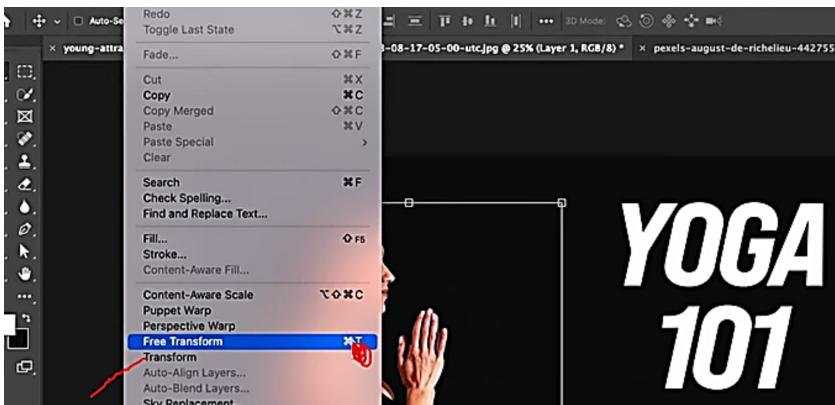
Selecting the layers you want to transfer directly from the document window is possible. Select **Layer** from the menu choices that appear after selecting **Auto Select in the Move tool's option bar**. Use Shift-click to select different layers. When you choose a layer within the group, click **Auto** choose first, and then **Group** to choose the whole group.

- Complete any of the ensuing tasks:

- Using the document window, move any object to a **chosen layer**. Move each item on the tier in unison.
- To move things, simply hit **an arrow button on the keyboard** and drag a single pixel.
- Holding down **Shift** while pressing an arrow button on the keyboard will move the items about 10 pixels.

Rotate a layer

- You can rotate a layer by selecting it from the Layers panel.
- **Select > Deselect** to remove any chosen items from the image.
- **Select Rotate under Edit > Transform > from the menu.** The layer's bounds are indicated by the appearance of a bounding box.



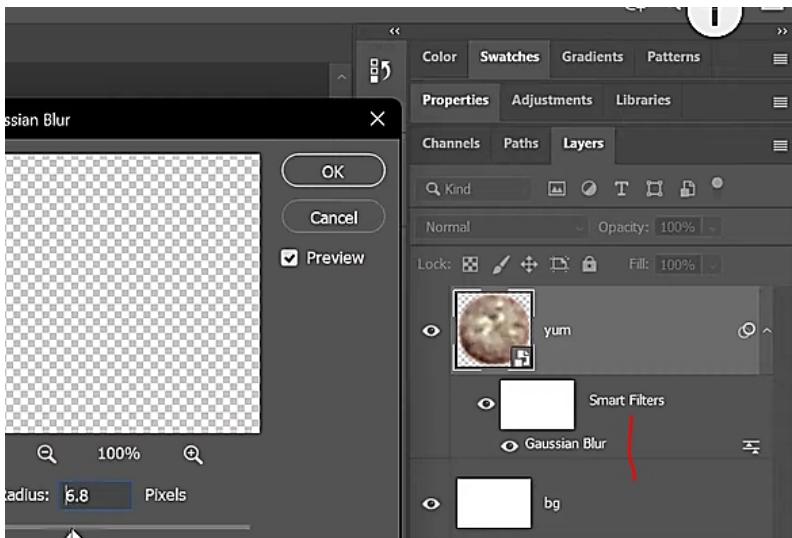
- Move the cursor outside the bounding box; an arrow with two curves will appear. Use the shift key to restrict the angle of rotation to 15° steps.
- When you're finished, choose the check mark in the choices bar or press Enter on Windows or Return on Mac OS. To stop the rotation, use Esc or select the Cancel Transform icon in the options menu.

Using Smart Filters

A filter is called a smart filter if it is applied to a smart object. Smart Object layers in the Layers panel are enhanced with Smart Filters, which then show up underneath those layers. Smart Filters are non-destructive since they may be hidden, taken out, or altered.

Except for Lens Blur, Flame Picture Frame, Trees, and Vanishing Point, every Photoshop filter that has been configured to operate with Smart Filters can be used as a Smart Filter. Furthermore, useful as Smart Filters are Shadow and Highlight.

- Choose a **Smart Object layer**, a filter, and then the filter settings in order to use Smart Filters. A Smart Filter can be modified, rearranged, or removed after it has been applied.



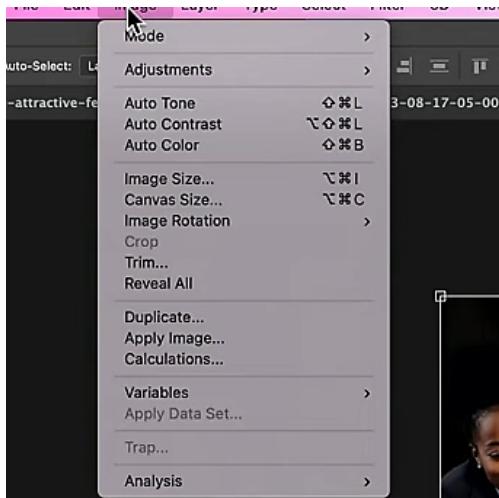
- The Layers panel appears to the right of the Smart Object layer. To expand or contract the Smart Filter view, touch the triangle beside the Smart Filter icon. Alternatively, use the Layers panel menu to select Layers panel Parameters, then pick Expand New Effects from the dialog box.

Smart Filter effects can be selectively masked using filter masks.

Apply a Smart Filter

- Take one of these actions;
 - Select the layer from the Layers option in order to add a Smart Filter to the entire Smart Object layer.
 - Choose the region of a Smart Object layer to which you wish to restrict the effects of the Smart Filter.
 - After choosing the layer, select Filter > Convert For Smart Filters to apply a Smart Filter to a conventional layer. Next, press OK.
- Do any of the following;
 - Pick a filter using the Filter menu. Any filter, including third-party filters that work with Smart Filters, can be selected. It is not supported to use Vanishing Point, Extract, Liquify, or Pattern Maker.

○ Select **Image > Adjustments > Shadow/Highlight**.



When you apply a number of filters through the Filter Gallery, a collection called "Filter Gallery" will appear in the Layers panel. A double-click on an entry within the Filter Gallery allows you to adjust individual filters.

- Select **OK** after configuring the filter choices. In the panel with layers beneath the Smart Object layer, the Smart Filter will be shown beneath the other Smart Filters. A warning icon in the Layers panel alongside a Smart Filter indicates that the filter is incompatible with the depth or color mode of the image.

After a Smart Filter is applied, you can relocate it, or a group of Smart Filters, to a different Smart Object layer in the Layers window by using the Alt or Option keys while dragging. Dragging Smart Filters onto ordinary layers is not possible.

Change a Smart Filter

Whenever a Smart Filter includes configurable settings, you can change them whenever you'd like. Additionally, you can change the mixing options for Smart Filters. It is not possible to preview filters that are assembled on top of a Smart Filter when editing one. Photoshop will display the filters piled over the Smart Filter once more after you have finished modifying it.

Change the Smart Filter's settings

- Click twice on the **Smart Filter** in the panel containing layers.
- Configure filter choices, and select **OK**.

Change the Smart Filter Blending settings.

Editing the blending options for Smart Filters is similar to utilizing the Fade command when applying a filter to a conventional layer.

- In the panel that contains layers, double-click the **Edit Blending Settings** sign next to the Filter.
- Choose **blending options**, and then select **OK**.

Hide Smart Filters

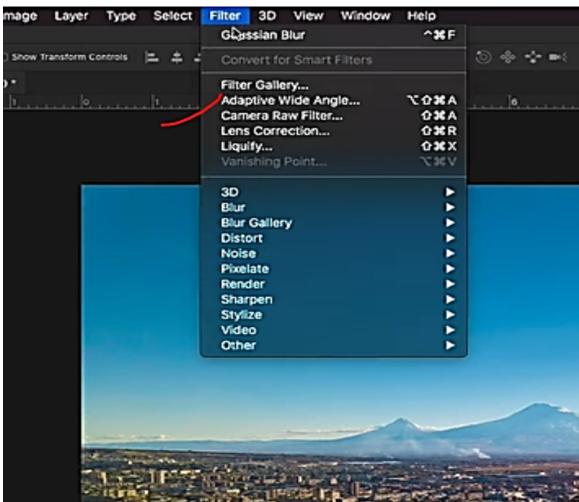
- Take any of the subsequent actions;
 - You can hide a specific Smart Filter by clicking the eye symbol next to it in the Layers panel. To display the Smart Filter, tap on the **column once more**.
 - In order to view the complete list of all Smart Filters that were recently applied to a Smart Object layer, select the eye symbol located near the Smart Filters line in the Layers panel. The Smart Filters will appear when you tap on the column once again.

Duplicate, reorganize, or remove smart filters

You can rearrange, duplicate, or remove Smart Filters from a Smart Object if you decide it's not required to apply them to it.

To reorder Smart Filters;

- Navigate to the **panel containing layers**, and move a Smart Filter up or down in the list. Click twice on **Filter Gallery**



to have any gallery filters re-ordered. Note that Photoshop adds Smart Filters from the bottom to the top.

To duplicate smart filters;

- Go to the layers panel in order to access it. You can then drag and drop a **Smart Object** or **select a different location inside the Smart Filters list** by using the Alt- or Option-drag Smart Filter. To repeat all of the filters, simply **Alt- or Option-drag the Smart Filters indicator** that shows up close to the Smart Object layer.

To delete Smart Filters;

- Move a specific Smart Filter to the **Delete icon** located in the lower section of the layer-containing panel in order to remove it.
- To delete each Smart Filter that has been added to a layer, select the **Smart Object layer** and **select Layer > Smart Filter > Clear Smart Filters**.

Mask Smart Filters

Anytime you apply a Smart Filter on a Smart Object in Photoshop, the Layers window shows an empty (white) mask thumbnail underneath the Smart Object on the Smart Filters line. The full filter

effect is displayed by default on this mask. (If you select something in Photoshop before applying the Smart Filter, the Layers panel's Smart Filters line will show the appropriate mask rather than an empty mask.)

Smart Filters can be masked selectively with filter masks. You cannot mask certain Smart Filters; masking Smart Filters is applicable to all Smart Filters.

Filter masks serve the same purposes and have several of the same applications as layer masks. In the Channels panel, filter masks are stored as alpha channels and can be fetched as a selection, just like layer masks.

A filter mask, like a layer mask, can be painted on. Black-painted sections of the filter are hidden; white-painted areas are visible; and gray-painted areas appear with varying degrees of transparency.

You can alter the filter mask's density, flip the mask, and add feathering to its edges by utilizing the parameters found in the Masks panel.

Mask Smart Filter effects

- Select the filter mask image to confirm that it is active in the layers panel. After that, a border will be shown around the mask thumbnail.
- Select any painting or editing tool.
- Do any of the following:
 - To conceal parts of the filter, get the mask painted black.
 - Color the mask white to reveal sections of the filter.
 - Apply gray paint on the mask in order to partially reveal the filter.

Alter the feather mask edges or filter mask opacity.

- To access the panel with masks, choose the filter mask thumbnail or the Smart Object layer in the Layers panel, and then choose the **Filter Mask button**.
- Drag the **Density scale** in the mask window to change the

opacity of the mask. Drag the Feathering slider to add feathering to the edges of the mask.

Show just the filter mask.

- Alt- or Option-clicking the filter mask picture in the Layers window will select it. Option- or alt-select the filter mask picture once more to bring up the Smart Object layer.

Shift or duplicate filter masks

- Drag the mask to a new Smart Filter Effect to move it
- To duplicate the mask, simply drag it to a different Smart Filter Effect using Alt-drag on Windows or Option-drag on Mac OS.

Turn off a filter mask

- Get to do any of the following;
 - In the layer panel, shift-click the thumbnail of the filter mask.
 - After selecting the filter mask thumbnail image in the Layers panel, select the Disable/Enable Mask symbol in the Masks panel.
 - Beneath Layer > Smart Filter, select Disable Filter Mask.

A red X covers the filter mask thumbnail when it is disabled, revealing the Smart Filter without any mask. To enable the Smart Filter mask image again, shift-click on it.

Deleting a Smart Filter mask

- Select the Layers panel's image of the filter mask, and then select the Delete symbol from the Masks panel.
- To remove the symbol, move the filter mask's thumbnail in the Layers panel.
- After selecting the Smart Filter Impact, go to Layer > Smart Filters and select Delete Filter Mask.

Include a filter mask

You can add a filter mask again after deleting the first one.

- Select the **Smart Object layer**, then click the **Filter Mask icon** in the Masks panel to add an empty mask.
- After the decision of a selection, choose Add Filter Mask by doing a **right-click (on Windows) or control-click (on Mac OS)** on the Layers panel's Smart Filters line.

Painting a layer

There are numerous ways to paint objects and layers in Photoshop. One of the simplest is to utilize the Color blending mode and the Brush tool.

- Select the "**Create A New Layer**" button located at the Layers panel's bottom. After that, Photoshop will refer to this layer as Layer 1.
- Select **Color by using the Blending Mode option** located at the top of the layer panel after selecting Layer 1.

The Color blending mode blends the base color's brightness (the color already on the layer) with the hue and saturation of the color you're applying. When coloring monochrome photos or tinting color images, this is a useful blending style to utilize.

- In the panel containing tools, choose the **Brush tool**. In the options bar, choose a 60-pixel brush that has a hardness of 0.

In the Layers window, you usually choose a whole layer. When you do this, the layer becomes active, but there is no active selection. When you **Ctrl-click (Windows) or Command-click (MacOS)** the **layer thumbnail**, Photoshop picks the layer's contents, resulting in an active selection. It's a simple way to select all of a layer's contents—but without the transparent portions.

- Ensure that layer 1 is still chosen then with the use of the brush tool paint the areas you would like to have colored.

As you paint, you can adjust the brush size by tapping the bracket buttons on your keyboard. **Hitting the Left Bracket button ([) will reduce the brush size; hitting the Right Bracket button (]) will increase it.**

- When you are content with the painting you have done, click on **Select > Deselect** then **save your work**.

Activity

1. Arrange the layers in your document.
2. Employ the use of smart filters in your image.
3. Paint a layer in any of your images.

Chapter 18

Make and Alter brushes

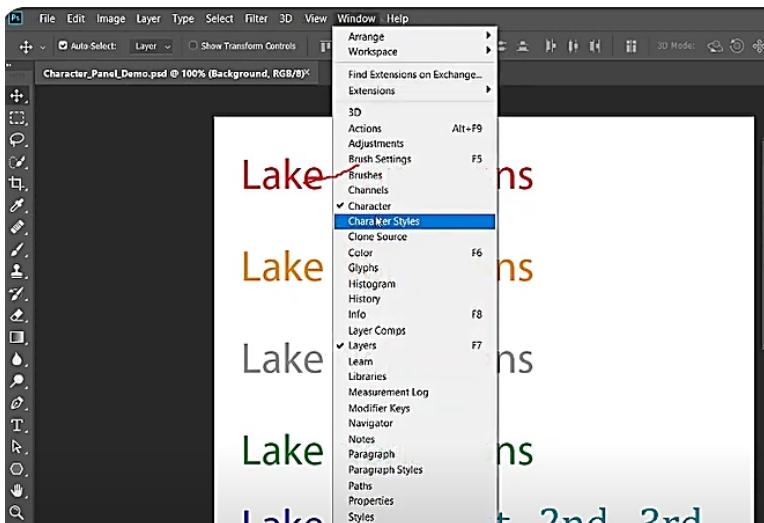
There are several ways to create brushes that apply paint to images: you can use an already-existing preset brush, a brush tip form, or create a custom brush tip from a portion of the image, and then choose parameters from the Brush Parameters panel to control the paint application.

An overview of the brush settings panel

You can modify and make new brushes using the Brush Settings panel. The Brush Settings window shows the brush tip settings, allowing you to choose how paint is added to a picture. The panel's bottom brush stroke preview shows you how paint strokes will look with the present brush selections.

Show the brush options and panel

- Go to **Windows > Brush Parameters**. Additionally, you can click the panel button on the left side of the choices bar to select a painting, erasing, toning, or focus tool.



- Choose an option configured on the left of the panel. The choices that can be found for the configuration will be shown

on the panel's right side. It is worth noting that you can choose to select the checkbox that is on the left of the choices configured to allow or disallow the choices without having to see them.

Bring in brush sets and brushes.

You can choose to import diverse free and purchased brushes for instance Kyle's Photoshop brush packs into Photoshop. Follow the set of instructions below;

- Alternatively, you can right-click a brush that is listed in the Brushes panel and select Get More Brushes from the contextual options. Alternatively, you can click on **Get More Brushes** from the flyout menu in the brush panel.
- Download a brush pack. For instance, you can choose to **download Kyle's "Megapack"**.
- With Adobe Photoshop still running, click twice on the **downloaded ABR file**. The brushes you have included will now be shown in the panel containing brushes.

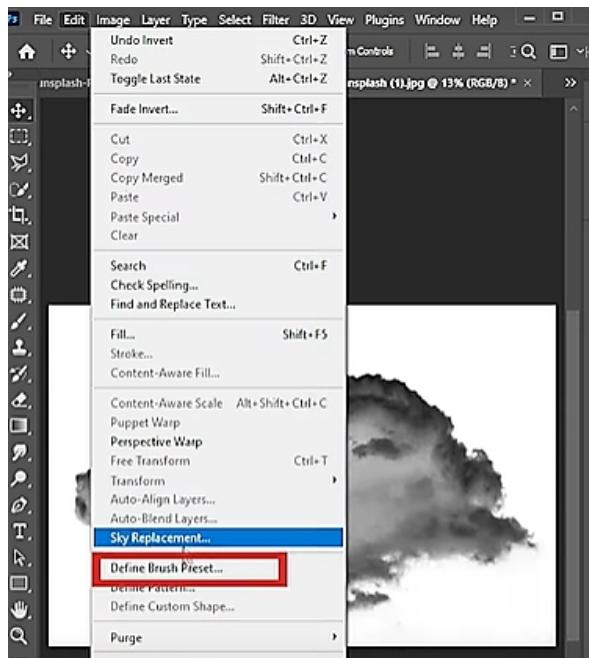
Alternatively, you can use the Brushes window flyout option to import brushes, which will open the downloaded ABR file. The Brushes panel now has the downloaded brushes added to it.

Create a brush tip from an image

- Select the region of the image that you want to use as a custom brush by using any selection tool. The brush's shape can have a maximum size of 2500 pixels by 2500 pixels. You won't be able to change the sample brushes' hardness while painting. Set the Feather's pixel configuration to zero to create a brush with crisp edges. Alternatively, you can increase the Feather settings to produce a brush with softer edges.

The brush tip picture will thereafter be changed to grayscale if you select a color image. The precise shape of the brush point remains unaffected by any layer mask applied to the image.

- Select **Define Brush Preset** under **Edit**.



- Give the brush a name and then click on OK.

Make a brush, then select your painting settings

- Select an erasing, painting, toning, or focusing tool. Choose **Window > Brush Parameters** after that.
- In the Bruhs Settings panel, choose **your preferred shape of a brush tip**, or choose **Brush Presets** to make a choice of a preset that exists.
- Select **Brush Tip Shape** from the menu on the left, then adjust the settings.
- There are more options for configuring the brush, such as adding dynamic components, adjusting the dispersion within a stroke, making textured brushes, adjusting the way brushes change dynamically, and drawing with a graphics tablet.
- In order to secure the brush tip form attributes (keeping them if you choose a different brush preset), choose **the unlock symbol**. Select the **lock icon to reveal the tip**.
- To have the brush saved for much later use, click on **New**

Brush Preset from the menu of the brush panel.

To permanently store your new brush or give it to someone else, you must save it as a part of a brush collection. Choose Save Brushes using the Brush Presets window choices, then store to an entirely fresh set or override an existing set. If you change or reset the brushes in the Brush Presets panel without first saving them as a set, you can lose your newly selected brush.

Common brush tip shape choices

In the Brush parameters panel, you can adjust the following options for conventional brush tips:

Size This option controls the brush's size. Either move the slider or enter a value in pixels.

Use Sample Size This choice helps to have the brush reconfigured to its initial diameter. This option is only available if the brush tip's form was produced by sampling pixels from an image.

Flip X This choice alters the direction of the tip of a brush on its x-axis.

Flip Y modifies the y-axis brush tip direction.

Angle This option sets the rotation angle of the long axis of an ellipse or sampling brush with respect to the horizontal. Move the preview box's horizontal axis or enter a value in degrees.

Roundness The ratio of the brush's long to short axes is shown by this selection. Change the points within the preview area or enter a percentage. A circular brush is indicated by a value of 100%, a linear brush is shown by a value of 0% and elliptical brushes are indicated by an intermediate value.

Hardness Managing the brush's hard center size is aided by this selection. Type a value that represents a % of the brush diameter, or use the slider to enter a value. Sampled brushes are not modifiable in hardness.

Spacing This characteristic sets the spacing between brush strokes. You can type in a proportion of the brush thickness or a number to modify the spacing by using the slider. Should you deselect this option, the cursor speed will dictate the spacing.

It's important to remember that while employing a preset brush, use the [key] to lower the width and the [key] to raise the width. Shift + [to decrease brush hardness; Shift +] to increase brush hardness for hard round, soft round, and calligraphic brushes.

Brush tip configurations

You can choose several bristle qualities at the tips of the bristles, which produce extremely realistic and natural-looking strokes. Configure the subsequent brush tip shape parameters in the Brush panel:

Shape aids in figuring out the bristle arrangement overall.

Bristles manage the overall bristle density.

Length alters bristle length

Thickness controls how wide each bristle is

Stiffness manages bristle flexibility. At low configurations, the brush shape will deform with ease.

Spacing Controls how much space there is between the brushstrokes. Enter a value to change the spacing, or use the slider to show an estimate of the brush thickness. When you reject this option, the spacing will be determined by the cursor's speed.

Angle establishes the angle of the brush tip when painting using a mouse.

Erodible tip options

Similar to pencils and crayons, erodible tip brushes break down naturally while you draw. You may assess the level of wear by using the Live Brush Tip Preview, which is situated in the upper left corner of the picture.

Size controls the brush's size. Either move the slider or enter a value in pixels.

Softness controls the wear rate. Either move the slider or enter a value in %.

Shape controls the tip's form. Select one of the many available tip options.

Sharpen Tip takes the tip back to its initial sharpness

Spacing This attribute controls how far apart the brush marks are in a stroke. You can adjust the spacing by typing a value or by using the slider to select a percentage of the brush diameter. If you deselect this option, the cursor speed will dictate the spacing.

Airbrush tip options

Airbrush tips imitate spray cans using a 3D conical spray. Using a stylus, you may adjust the dispersion of sprayed strokes by adjusting the pen pressure.

Size controls the brush's size. Either move the slider or enter a value in pixels.

Hardness manages the size of the hard center of the brush.

Distortion manages the distortion to add to the paint's spray.

Granularity determines the paint drop's level of graininess.

Spatter Size controls the paint droplet size.

Spatter Amount regulates the quantity of paint droplets.

Spacing This regulates the space that separates the droplets. The cursor's speed will assist in determining the spacing if this option is deselected.

More brush choices

Noise gives each brush tip a random element. Using soft brush tips—brush tips with gray values—is the optimal way to use this option.

Wet Edges allow paint to accumulate around the brushstroke's edges to create a watercolor appearance.

Airbrush/Build-up Simulates conventional airbrush techniques by applying progressive tones to an image. The Brush panel's Airbrush option corresponds to the options bar's Airbrush option.

Smoothing Brush strokes have smoother curves as a result. This option works best when painting fast with a stylus; nevertheless, it may cause a tiny latency in stroke rendering.

Protect Texture Give each texture-enabled brush preset the same pattern and scale. Choose this option if you want to try to mimic a uniform canvas texture when painting with different textured brush

tips.

Match colors

Match color in different images

Multiple images, layers, or selections can have their colors compared using the Match Color command. You can also use it to adjust an image's luminance, adjust its color range, and remove color casts from images. Only in RGB mode can you use the Match Color command.

Selecting the Eyedropper tool is a prerequisite for using the Match Color command. Observe the color values of every single pixel in the Info window as you make adjustments to the image by using the Eyedropper tool. This panel notifies you of color value changes as you apply the Match Color command.

The colors of the source image and the target image are compared utilizing the Match Color command. When certain colors (such skin tones) must match the colors in another image, or when color consistency between photographs is required, Match Color comes in handy. The Match Color instruction can match not just the colors of two pictures, but also the colors of numerous layers in one image.

Compare the colors of the two photos.

- Make a choice between the source and target images (optional). If no option is selected, the **Match Color instruction** will evaluate the images' overall picture statistics.
- Once the desired image has been created, make it active by choosing **Image > Adjustments > Match Color**. If you are adding the Match Color instruction to a specific layer, ensure that the layer is active in the intended image.
- Select the photo from the **Source menu in the photo Statistics area** of the Match Color dialog box whose colors you wish to match in the target image. Choose **None** if it is not required to use a different image to calculate the color correction. If you choose None, the source picture and the target image will remain the same. If you need to match the hues in the source photo, use the Layer option to choose the layer. Merged is another option from the layer option that you

may use to make sure every layer in the original image has the same color scheme.

- If you have created a selection in the image, do any of the following;
 - To apply the adjustment to the entire target image, choose the option to **Ignore Selection When Making Adjustments** under the Destination Image area. Applying the update to the entire target image, this option disregards the target picture selection.
 - If you have selected an area of the source image and would like to compute the adjustment using the colors in that selection, select **Use Selection In Source To Calculate Colors in the Image Statistics box**. If you disable this option, the adjustment will be calculated using the colors within the whole source image, regardless of the original image's selection.
 - Click **Use Selection In Target to Calculate the Adjustment** in the image's Statistics section if you made a choice in the target image and would like to use the colors in the selection to compute the adjustment. If you turn this off, the adjustment will be calculated using the hues of the whole target image, without taking the target image selection into account.
- To instantly take off a color cast in the target image, choose the **Neutralize option**. Ensure that the Preview choice is chosen so that your picture will be updated as the adjustment is being made.
- Move the Luminance slider to adjust the brightness of the target image. Alternatively, enter a number in the Luminance field. One is the smallest value, two hundred is the highest value, and one hundred is the default value.
- Drag the Color Intensity scale to change the color saturation of the target image. You can also write something in the Color Intensity area. The lowest value, 1 (which generates a grayscale image), is the lowest value, 200 is the maximum, and 100 is the default.

- Drag the Fade scale to control the level of adjustment applied to the image. The adjustment will be lessened if you drag the scale to the right.
- Choose **OK** to add the modifications.

In the same image, align the colors of two layers.

- (Selective) In the corresponding layer, make a selection. Use this approach when you want to synchronize a color area (like facial skin tones) in a single layer to an area in another.
- The entire source layer's colors will match the Match Color if you don't select anything.
- Choose **Image > Adjustment > Match Color** after making sure the layer you want to target is active.
- Select the **image from the Source option in the Picture Statistics area of the Match Color dialog box** to ensure that it equals the picture in the target image.
- Make sure to select the layer with the hues you want to match from the Layer menu. To match the colors of every layer, you may also select **Merged from the Layer menu**.
- If you created a selection in the image, get any of the following done:
 - In the Destination Image section, choose **Ignore Selection When Applying Adjustment** if you want to apply the adjustment to the whole target layer. This option applies the alteration to the whole target layer, disregarding the selection of the target layer.
 - Click **Use Selection In Source To calculate Colors in the Image Statistics box** if you have made a choice in the source image and desire the adjustment to be computed using the color pick. When calculating the adjustment, uncheck this choice in order to utilize every color in the source layer as a whole rather than just the selection.
 - In the Image Statistics section, select **Use Selection In Target To Calculate Adjustment** if you would want to calculate the adjustment using only the colors in the

designated area of the target layer. Deselect the option to disregard the selection if you would like the modification to be made using the target layer's whole color scheme.

- If a color cast appears in the target layer, choose the **Neutralize alternative** to right away eliminate it. Ensure that the Preview choice is activated so that any changes you make will update your image.
- To adjust the brightness of the target layer, move the Luminance slider. As an alternative, enter text in the Luminance field. The default number is 100, with 200 being the maximum value and 1 being the lowest.
- To modify the color pixel value range of the target layer, adjust the Color Intensity scale. Alternatively, you can type text into the Color Intensity area. The lowest number is 1 (which results in a grayscale image); the greatest value is 200; and the standard value is 100.
- To control how much the image has been altered, move the Face slider. Slide the slider to the right to decrease the amount of adjustment.
- Choose **OK** to get the changes applied.

Save and use the Match Color command's settings.

- In the Statistics area of the image of the Match Color dialog box, click the **Save Statistics** button. Once it has been named, save the configurations.
- In the Statistics area of the Match Color dialog box image, select the **Load Statistics** button. Find the settings in the saved file and load them.

Convert a color picture to monochromatic

Color photography is essential when the tones and shades in your image are clear and vibrant, allowing the viewer to perceive even the smallest details. If you prefer not to be distracted by colors and instead want to focus on the subject and textures in a picture, black-and-white photography is the best choice. Your photos may become

more dramatic if you use black-and-white effects.

Utilizing Photoshop's black-and-white adjustment layer, simply follow these simple steps to convert a color image to black and white:

- Using the black and white adjustment layer, turn your picture to black and white;

Complete any of the subsequent tasks to obtain access to the black-and-white adjustment layer;

- Open the **Adjustments panel** and choose the **Black and White icon**.
- Choose **Layer > Add Adjustment Layer > White & Black**. Enter the adjustment layer's preferred name in the New Layer dialog box, then click **OK**.
- (Optional) Use the Properties panel to fine-tune your results.

Preset: Choose from an already-made grayscale mix or an already-saved Custom mix. If you would like to keep your own blend, pick the properties menu icon and then save Black & White Preset.

Auto: establishes a grayscale mixture according to the color values in your image. The Auto mix can be utilized as a starting point to adjust gray levels with the color sliders, or it often yields satisfactory results.

Tint: to add some color to a text. Allow Tint. Choose the **color swatch** to bring up the Color Picker then choose the **tint color**.

You can use color sliders to change the grayscale of individual colors in your image. To restore the grayscale to the original image color, move the adjuster to the left for a darker tone or to the right for a brighter tone.

- The On-image of the modification tool can be used to change colors immediately on the canvas. Slide the color slider to the desired spot to change the color by selecting the image and moving it left or right.

- To return the adjustment defaults, select the **Reset symbol**.
- Save and distribute the outcomes. Once you're happy with how your black-and-white image turned out, save it and post it to social media and the Adobe Photoshop community. Don't forget to use the hashtag #black and white Photoshop and to properly credit Adobe Photoshop.

Activity

1. Create a brush and edit any existing one you have.
2. Edit an image and ensure that the colors used during the edit are a match.

Chapter 19

About the Timeline Panel

The Timeline panel is certainly familiar if you've used a video-editing product like Adobe Premiere Pro or Adobe After Effects. The Timeline panel is where you put together and arrange video clips, graphics, and audio files into a movie file. Without leaving Photoshop, you may change the duration of each clip, apply filters and effects, modify properties like position and opacity, mute sound, add transitions, and perform other common video-editing activities.

- Select **Window > Timeline** in order to open the Timeline panel. If the Timeline happens to be too short to show both the video groups and the audio track all at the same time, ensure that the Timeline panel is extended by moving its top border up. Each video clip or image will be shown in a box in the Timeline panel and also as a layer in the Layers panel. If you notice that the timeline contents are collapsed against the left side such that the content titles and previews are not seen, move the magnification scale to the right side to have a view of more details.
- Choose the **Play button** in the Timeline window to see the movie. The playhead will move across the time ruler, showing each frame of the movie.
- Tap the spacebar to pause playback.
- Move the play head to another point in the time ruler.
- When you are done exploring the end file, close it, but ensure Photoshop is still open. Don't save any alterations you might have made.

Photoshop displays instructions across the document window whenever you work with the use of the video. Keep key content within the center region marked by the recommendations to reduce the possibility of your content being cut off along the sides of some televisions. If there is no need for you to see the guides, go to **View > Show > Guides and uncheck the box**.

Creating a new video

Working with video in Photoshop differs from working with static photos. You might find it easier to construct the Photoshop document first and then import the assets. You'll select a video preset and then add nine video and image assets to your movie.

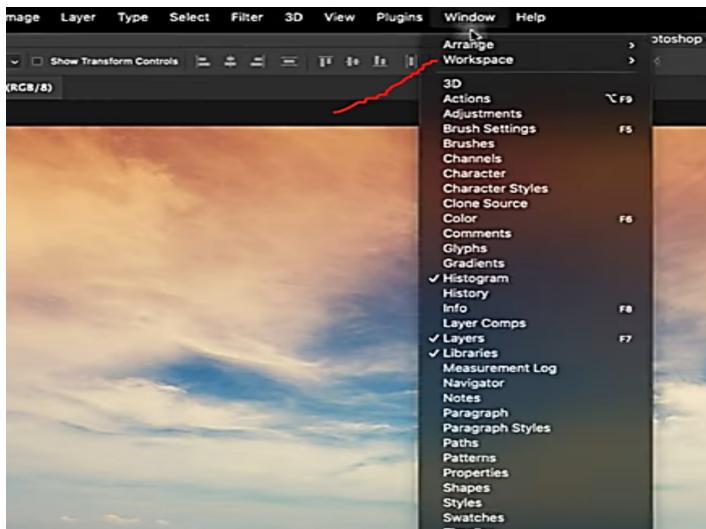
Photoshop has a number of film and video presets from which to pick. You will make a new file and choose an acceptable preset.

- Navigate to the Home screen, choose the **New File button**, or click on **File > New**.
- Give the file a name.
- Choose **Film & Video** in the document type bar at the upper part of the dialog box.
- In the Blank Document Presets part, choose **HDV/HDTV 720p**.
- Accept the default configurations for the other choices and select **Create**.

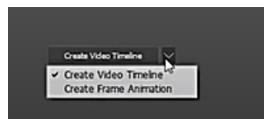
If Photoshop prompts you to choose between saving to Cloud Files and saving to your computer, select **On Your Computer**. There is also an avenue to select **Don't Show Again**, however, this option will be deactivated if you restore Photoshop preferences.

Photoshop includes features designed expressly for working with video, such as the Timeline panel, which may already be open if you saw the final clip. You'll select the Motion workspace and configure your panels to ensure you have access to the resources you require. Then, import the video clips, graphics, and audio files that you'll need to make the movie.

- Select **Window > Workspace > Motion**. Presets will then organize panels and give priority to tools that are used to build a timeline.



- Drag the top edge of the Timeline panel so that the panel will fill the bottom third of the workspace.
- Choose the **Zoom tool** and then select **Fit Screen** in the options bar so that you will be able to have a view of the whole canvas that is within the top half of the screen.
- In the panel of the Timeline, choose **Create Video Timeline**.



Photoshop will then design a new video timeline which will include two default tracks: Layer 0 and Audio Track.

- Choose the **Video menu** in the **Layer 0** track, and then click on **Add Media**.

Changing the duration and size of clips in the timeline

The videos have varying lengths, which means they play for varying amounts of time. If you want all of the clips in the film to be the same length, cut them all to 3 seconds. The duration of a clip is measured in seconds and frames: 03:00 is three seconds; 02:25 is

two seconds and twenty-five frames.

- Move the Control Timeline Magnification slider to the right at the lower part of the Timeline panel to zoom in on the timeline. If there is a need for you to be able to have a view of a thumbnail of each clip and enough detail in the time ruler that you can accurately alter the duration of each of the clips.
- Move the right edge of the first clip to 03:00 on the time ruler. Photoshop will then show the endpoint and the duration as you move so that you can locate the right point to stop.
- Move the right edge of the second clip to a duration of 03:00 also.

This method of cutting a video clip short eliminates some of the clips in the video and does not change the speed of the video. In this case, you ought to employ the opening three seconds of every clip. You would trim a video clip at both ends if you intended to use a different portion. When you move a video clip's endpoint in Photoshop, you can see precisely how it will show up in the final frame of the clip when you release the mouse button.

- Take the same process for the other clips you might have such that all will have a duration of 3 seconds.

Create Timeline animations

In the Timeline panel, you can make keyframes to animate layer information when you change the current time signal to a new time/frame. Next, you can change the position, opacity, or style of the layer content. By evenly altering the layer settings across the new frames, Photoshop produces or modifies a series of frames between two pre-existing frames to provide the impression of movement or metamorphosis.

To fade out a layer, for instance, set the layer's transparency to 100% in the initial frame and then select the layer's Opacity stopwatch. After that, shift the current-time indicator to the final frame's time/frame and set the layer's transparency to 0%. In Photoshop, the opacity of the layer is consistently reduced over the extra frames, and frames are interpolated between the beginning and end frames.

Photoshop can be used to paint on an empty video layer in order to interpolate pixels in an animation, or it can be used to create a hand-drawn animation frame by frame.

For the creation of a timeline-dependent animation, make use of the subsequent general workflow;

- Create a new file and include details about its backdrop and size. Make sure the final animation's size and frame aspect ratio are appropriate. The recommended default color mode is RGB. If there are no particular reasons to alter the pixel aspect ratio, depth of bit, or resolution, leave it at 72 pixels/inch, 8bpc, and square.

Check to see if the timeline window is open. Repeat the procedure as necessary by selecting the icon to the opposite side of the down-pointing arrow in the panel's center, clicking the "**Create Video Timeline**" menu item, and selecting the button again. If the Timeline panel is in frame animation mode, choose the **Convert To Video Timeline icon**, which is situated in the lower-left corner.

- Set the **Timeline Frame Rate** by selecting it from the panel menu. Make sure you specify both the length as well as the frame rate.
- Add a layer—background layers cannot be animated. Should you require content to be animated, you can either add any of the following or change the background layer back to a regular layer:
 - An additional layer for content addition.
 - An additional layer of video for adding video material
 - A fresh, empty video layer that can be used to duplicate material or make manually generated animations.
- Fill up the layer with content.
- (Optional) Provide a layer mask; this can be used to expose a subset of the layer's content. You can get a layer mask animated to show various portions of the content of the layer over time.

- To set the initial keyframe configuration, move the current time indication to the desired time or frame.
- Keyframing can be enabled for a layer attribute by selecting the triangle close to the layer name. The characteristics of the layers will be displayed as a triangle pointing downward. Next, select the stopwatch to set the layer property you want to animate on the first keyframe. Additionally, you have the option to set up keyframes for many layer properties at once.
- Move the time indicator around to change a layer property; Move the current time indication to the moment or time interval where the layer's attribute will alter. Each of the following tasks are achievable;
 - Modify the layer's location to cause its content to move.
 - You can change the layer opacity to make stuff fade in or out.
 - A layer mask can be moved to display different parts of the layer.
 - Turn off or turn on a layer mask.

Some types of animation require additional layers containing the new content, like changing the color of an item or the content included entirely within a frame.

- Add more content-filled layers and adjust their layer attributes as necessary.
- Drag or trim the layer duration slider to adjust the timing of a layer's appearance in an animation.
- As you work on the animation, you may preview or play it using the controls on the timeline panel. After that, you can preview the animation using your web browser. In the Save For Web dialog box, you also have the ability to review the animation.
- **Keep the animation.** To save it as a GIF that is animated, utilize the Save for Web command; to save it as a picture sequence or movie, use the Render movie command. You may also choose to save it as a PSD file so that you can utilize it

with Adobe After Effects.

Animate layer attributes with keyframes.

Several layer characteristics, including Position, Opacity, and Style, can be animated. Each change can occur simultaneously with other changes or separately from them. It is recommended that you create the items on multiple levels if you need to animate them individually.

Here are some illustrations of how to make layer properties move:

- Position can be animated by moving the time indicator, rearranging the layer inside the document window, and applying a keyframe to the Position property.
- To animate a layer's opacity, add an appropriate keyframe to its Opacity property, adjust the layer's opacity in the Layers window, and then modify the layer's current time signal.
- You have the option to animate 3D attributes like item and camera location.

Make sure you define a minimum of two keyframes for each property in order to have it animated using keyframes. If not, any changes you create to the layer attribute will be applied throughout the life of the layer.

Select **the TimeVary stopwatch icon** on each layer attribute to start the animation. Whenever you activate the stopwatch for a property in Photoshop and modify the current time or the property's value, Photoshop creates new keyframes. A property that has the stopwatch turned off has no keyframes. Throughout the inactive stopwatch time, a value provided for a layer attribute stays valid for the layer. If the stopwatch is deselected, all keyframes linked to the relevant property will be deleted.

Choose interpolation method

The process of interpolating, also known as tweening, involves plugging in variables that are absent between two known values. Creating new values in between two keyframes is the common definition of interpolation in digital and film media. Setting the location of the graphic in the first and fifteenth frames and

designating them as keyframes will allow you to, for instance, move a picture element 50 pixels to the left in 15 frames. Between each of the two keyframes, Photoshop interpolates a frame. Keyframe interpolation allows for the animation of movement, styles, opacity, and global illumination.

The way a keyframe appears in the Timeline window depends on the interpolation method you choose for the keyframe interval.

Linear keyframe This option modifies the animation property uniformly across keyframes. The Layer Mask Position attribute is the sole exception, as it abruptly switches between the enabled and disabled states.

Hold keyframe This option keeps the current property configuration. This method of interpolation is quite useful for strobe effects, or when there is a need for layers to suddenly appear or disappear.

Complete the following tasks in order to select the technique for interpolation for a keyframe:

- Select a **keyframe** or several in the Timeline panel.
- Complete any of the ensuing tasks:
 - Click on a keyframe and use the right-click menu to select either Hold Interpolation or Linear Interpolation.
 - The panel menu will open; choose Keyframe Interpolation or Keyframe Interpolation > Linear.

Transfer the current time indicator to a keyframe.

After you add a property's first keyframe in Photoshop, the keyframe navigator appears. You can use this tool to navigate between keyframes and to modify or delete existing ones. In instances where the keyframe navigation diamond is in an operational state (yellow), the layer property's current-time indicator is precisely at a keyframe. The current-time indicator appears in-between keyframes while the keyframe navigation diamond is idle (gray). Arrows show on the two edges of the keyframe control box when there are additional keyframes for that attribute on either side of the current time.

- Select an arrow for the keyframe navigator in the Timeline window. The left arrow can be used to change the current-time indicator to the preceding keyframe. The right arrow will advance the current-time indicator to the next keyframe.

Choose keyframes

- Complete any of the subsequent tasks in the Timeline panel:
 - To choose a keyframe, select the symbol of the keyframe.
 - To choose more than one keyframe, Shift-click the keyframes or move a marquee for selection about the keyframes.
 - To choose all keyframes for a layer attribute, choose the name of the layer property close to the symbol of the stopwatch.

Move keyframes

- Select any number of keyframes from the Timeline panel.
- Any of the keyframe's selected symbols can be moved to the desired time. Multiple keyframes that you have selected will move together and maintain the same time interval.

To increase or compress the space between multiple keyframes, you can either right-click (Windows) or left-click (Mac OS) on the beginning or final keyframe in the selection. The keyframe at the other end of the selection stays in place while you drag, allowing you to adjust the animation's speed.

Choose keyframes and paste them

Keyframes for one attribute (such as Position) can be copied to the corresponding layer in another layer. When you paste keyframes, the offset that was copied from the current time indicator is reflected.

One layer's keyframes can only be replicated at a time. When keyframes are pasted into another layer, they show up in the destination layer's matching attribute. The current instant is shown in the first keyframe, and subsequent keyframes are shown

chronologically. The keyframes stay selected after pasting, so you can immediately move them across the timeline.

- In the Timeline panel, show **the layer property that contains the keyframes you would like to copy**.
- Choose **one or more keyframes**.
- Right-click a chosen keyframe, and select **Copy Keyframes**.
- Move your current time indication in the Timeline panel with the destination layer to the desired keyframe location.
- Choose **the destination layer**.
- Launch the panel option and select **Paste Keyframes**.

Delete Keyframes

- In the Timeline pane, choose any amount of keyframes and take any of the subsequent actions;
 - Choose **Delete Keyframes** from the context menu after selecting a keyframe with a right-click or control-click.
 - Select the option to "Delete Keyframes" from the panel menu.

Make animated drawings by hand.

If you would like to make animations that are manually drawn and composed frame by frame, you can add an empty video layer to your document. You may see what is inside the video layer beneath by putting an empty video layer over the video layer and modifying its opacity. The video layer's content can be rotoscoped by sketching or painting upon the blank layer.

- Design a new document.
- Include a blank video layer.
- Paint or include content to the layer.
- (Optional) Choose Enable Onion Skins within the panel option to activate the onion skin option in the Timeline panel.
- Move the time signal to the next frame by dragging it.
- Paint the layer or add content, positioning it a little differently from the content of the previous frame.

By selecting **Layer > Video Layers** followed by the appropriate action, you can add, remove, or duplicate an empty video frame from the empty video layer. You can get a preview of your animation as you add more hand-drawn frames by sliding the current time signal or using the playback controls.

Add, remove, or multiply empty video frames

An empty video layer can have an empty video frame added or removed from it. You can also choose to duplicate an existing frame in blank video layers.

- In the Timeline window, choose the empty video layer and then drag the current-time signal to the appropriate frame.
- Select one of the subsequent choices after choosing **Layer > Video Layers**:

Insert Blank Frame This adds a blank video frame to the currently selected blank video layer.

Delete Frame This option removes the current video frame from the selected blank video layer.

Duplicate Frame This option adds a duplicate of the current video frame on the selected blank video layer.

Indicate the onion skin settings.

In onion skin mode, content drawn on the specific frame in question is displayed along with stuff drawn on surrounding frames. To distinguish these additional frames from the current frame, you can adjust their opacity. For sketching frame-by-frame animations, onion skin mode is perfect since it offers reference points for stroke positions and other modifications.

The way that frames one and later appears is determined by the onion skin parameters whenever onion skins are enabled.

- Open the Timeline panel, then choose **Onion Skin Preferences**.
- Choose an option for each of the following;

Onion Skin Count: shows how many forward and backward frames are displayed. Fill up the text fields with the values for

Frames Prior (previous frames) and Frames Afterwards (forward frames).

Frame Spacing shows how many frames there are between each frame that is shown. A number of 1 indicates consecutive frames, for example, and a value of 2 indicates strokes spaced two frames apart.

Max Opacity sets the opacity percent for the frames that are shot immediately preceding and following the current time.

Min Opacity configures the percentage of the opacity for the previous frames prior to and after configuring onion-skin frames.

Blend Mode configures the display of the places where the frames overlap.

Launch an animation with multiple layers.

Layered Photoshop (PSD) files allow you to open animations saved in earlier versions of Photoshop. The bottom layer in the Timeline panel represents the first frame. The layers are arranged in rows in this panel.

- To open the Photoshop file, select **File > Open**.
- Select the layer you want to use and then select **Make Frames From Layers** within the window's option in the layers panel.

You can also adjust the animation, use the Save For Web instruction to store it as an animated GIF or use the Render Video command to store it as a QuickTime movie.

Adding transitions

To add transitions simply move and drop to include transitions like fading a clip into another.

- Select the **Go To First Frame button** that can be found in the upper-left corner of the Timeline panel to go back to the play head to the start of the time ruler.
- Choose the **Transition button** close to the upper-left edge of the Timeline panel. Choose CrossFade for instance, and alter

the Duration value to .25s (which is a quarter of a second).

- Move **CrossFade transitions between each of the other clips.**
- Move a **Fade With Black transition to the bottom of the final clip.**

You'll see that including a transition shortens the sequence slightly. Adding a 0.25-second crossfade requires 0.25 seconds of the clips on both sides of the transition to overlap in order for the transition to be possible. Due to this, the second clip moves forward in time by the duration of the transition, reducing the overall length of the sequence.

- To ensure that the transition is smoother, extend the Fade With Black transition by moving its left edge out to around one-third of the total length of the clip.
- Play back the whole sequence then click on **File > Save.**

Adding audio

With the use of Photoshop, you can add an independent audio track to a video file. In reality, the Timeline tab by default includes an empty audio track. You'll include an MP3 file as the soundtrack for this brief film.

- In the Audio Track at the bottom of the Timeline panel, choose the musical-note symbol, and then click on **Add Audio from the pop-up menu.** It is worth noting that you can also include an audio track by choosing the **+ sign at the far right end of the track in the Timeline window.**
- Once the above has been done, the audio file will be included in the timeline, if it's much longer than the video, you will use the **Split At Playhead tool to reduce it.**
- Drag the playhead to the bottom of the clip. With the audio file still chosen, choose the **Split At Playhead tool in the Timeline window.** The audio file will then be clipped at that point which will then lead to it becoming two audio clips.
- Once done both the audio and video length will now be the same length. You can choose to include fade so that it will end

smoothly.

- Choose an empty part of the **Timeline window** to close the **Audio panel**, and then save your work so far.

Rendering video

You are now prepared to convert the timeline to a single video file. Photoshop has a number of rendering choices. You'll choose options for videos that are streaming to share on the YouTube website.

- The Render Video button is located in the lower-left area of the timeline panel. Alternatively, you can choose **Se**
- Give the file a name.
- Choose **Select Folder**, and then pick **OK** or **Choose**.
- Select **YouTube HD 720p 29.97** from the Preset menu.

The Format menu's selections dictate which options appear in the Preset menu. For the YouTube options to show up in the Preset menu, the Format menu needs to be adjusted to H.264.

- Click on **Render**. Once done, Photoshop will show a progress bar as it exports the video. Based on your system, the rendering process may take some time.
- Save your work.

Activity

1. What is a Timeline panel?
2. Create a new video.
3. Add transitions to your video.
4. Add audio to a video file.
5. Render the video you have created.

Chapter 20

Frame Tool

You can easily learn to mask photos by using the frame tool. Create

frames from text or forms that you can then fill with photographs to use as placeholders. Simply put a new image into the frame to replace the existing one; it will automatically adjust to fit.

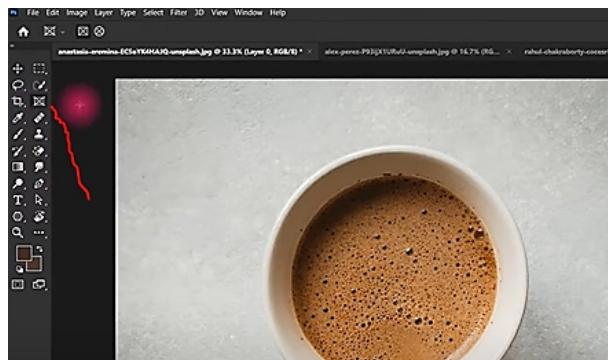
Make a frame placeholder

You can choose to use any of the following techniques for creating placeholder frames for images:

- Draw circular or rectangular empty frames on the canvas with the Frame tool.
- Convert any text or shape that already exists into a frame.
- To draw over the appropriate region of an existing picture on the canvas, use the Frame Tool.

Use the Frame Tool to make frames.

- Make a choice of the **Frame Tool** from the Tools panel or tap K.



- Choose between an ellipse and a rectangular frame from the tool's settings bar.
- On the canvas, draw another frame.

Make any text or form into a frame.

- Select **Convert To Frame** within the context menu by right-clicking (Win) or control-clicking (Mac) on a text or form layer in the layers window.
- Enter a name for the frame and set its width and height in the New Frame dialog.

- Select **OK**.

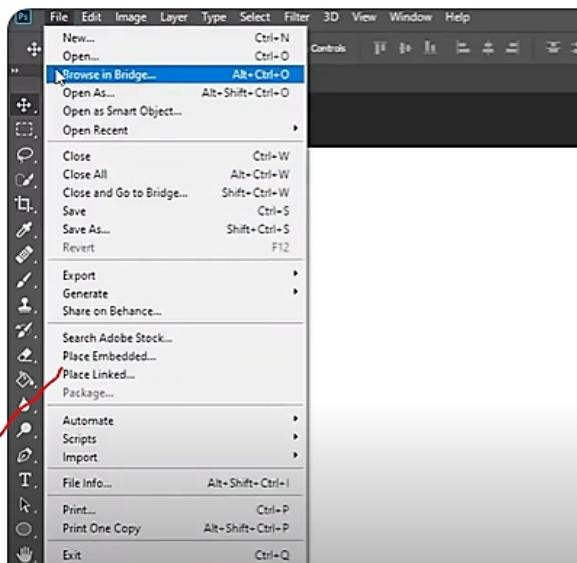
Sketch a frame above an existing picture on the canvas

- Either touch **K** or select the **Frame Tool** within the **tool panel**.
- Select an **elliptical** or **rectangular frame** from the **Tool choices menu**.
- Draw a frame across the desired portion of a picture that is on the canvas.
- The picture will be hidden by the frame edges when you draw them.

Put a picture inside a frame.

Content in frames is constantly positioned as Smart Objects, scaling is possible without causing damage. To suit the frame, the content automatically adjusts in size. One of three methods can be used to include content in a frame:

- Drag a **picture** into the frame from the **Libraries** window or **Adobe Stock**. When the object is deployed, it automatically becomes a **Smart Object** and reconnects to the **Creative Cloud Libraries**. If you want to access the initial separated layer (which has nothing to do with **Libraries**), you can use the **Place Layers** instruction in the **Libraries** panel or move from it while holding down the **Alt or Option key**.
- Drag a picture into the frame from the computer's hard disk. The picture is a **Smart Object** incorporated into it. To make a **Linked Smart Object** while dragging and dropping an image, hold down the **Alt (Windows) or Option (Mac) key**.
- Select a frame. Select **File > Place Linked or Place Embedded** from the menu bar. Choose an image to place inside the designated frame when the dialog box appears. The picture is linked or incorporated as a **Smart Object**.



- Move a pixel layer from the Layers panel into a vacant frame. A Smart Object is automatically created from the pixel layer.

You will discover more about the different framing options available in the layers window in the section that follows.

Choose the picture and the frame.

Do any of the subsequent tasks in order to select the frame as well as its image:

- On the Canvas, choose **the insert image once**.
- In the layers panel, select the frame layer.

Choose the picture alone

To select the insert image just, excluding the frame, complete any of the subsequent tasks:

- Click **the image twice on the Canvas**.
- Select **the content thumbnail** located in the frame layer using the Layers panel.

While in the selecting state, the insert photo can be independently changed. In this selection stage, click **twice to select the frame**

and its image again.

Choose just the frame

To select the frame by itself, complete any of the subsequent tasks;

- Press once on the canvas area's frame border in any of the previously mentioned selection states.
- Select the **frame thumbnail from the frame layer in the Layers menu**.

Replace a frames content

The insert image is replaced when a new image is dropped into a frame. Take one of these actions:

- Drag an image from the **Libraries panel** onto the **Canvas location's frame or onto the layer of the Layers panel's frame**.
- In the **Canvas area's frame**, drag a **picture from your local drive**.
- Choose a **frame or its picture** and make use of the **Properties panel's Insert picture options**: It's available on Open Libraries, Adobe Stock, and other sites. Use a local desk or local disk to place.
- Choose a **frame**. Select **File > Place Linked or Place Embedded** from the navigation bar. Choose an image to place in the designated frame from the dialog box that displays.

Play and Control actions

Play an action on a file

When you play an action, the recorded commands of the action are executed in the active document. (Some actions require you to make a choice before playing; others can be performed on an entire file.) You can remove some commands from an action or play only one command at a time. When the action pauses, you may indicate values or use tools in a dialog box if the action includes a modal control.

Do note however that in button mode, selecting a button helps with the execution of the whole action although commands that have

been removed previously will not be executed.

- You can select items to engage in the action, or you can access a file, if necessary.
- Complete any of the ensuing tasks:
 - To have a whole single action played, choose the name of the action, and select the **Play button in the Actions panel**, or you can also select **Play from the panel menu**.
 - If you added a key combination to the specific action, tap that combination in order to have the action played instantly.
 - To have just a part of the action played, choose the command from which you would like to start playing, and select the **Play button** in the panel containing Actions, or you can also select **Play from the panel menu**.
 - To play a single command, select it and then press **Ctrl (Windows)** or **Command (Mac OS)** on the **Play button in the Actions panel**. You can alternatively double-click the command while holding down **Ctrl (Windows)** or **Command (Mac OS)**.

Specify playback speed

You can modify the playback speed of an action or pause it so you will be able to debug an action.

- Select **Playback choices from the menu of the Actions panel**.
- Indicate a specific speed and choose **OK**.

Accelerated this option plays the action at the right speed.

Step By Step Prior to going on to the next command in the sequence, this option completes every instruction and redraws the image.

Pause For Seconds specifies the interval between commands that the application should wait to execute before executing every action.

A quicker action can be performed by playing it at a faster pace, which prevents the screen from refreshing while the action is executed. Instead, files can be opened, updated, saved, and closed while never appearing on the screen. Alternatively, select the **Step By Step speed** if you would want to see the documents on screen as the action is running.

Manage actions

Manage the tasks in the activities box so that just the actions necessary for a project are available and that the activities retain their structure. You can rearrange, copy, remove, rename, and modify the action options in the Actions panel.

Reorganize the actions in the panel of actions

- Precede or follow another action by moving the activity in the Actions window to its new location. Once the chosen position is shown by the highlighted line, release the mouse button.

Duplicate actions, commands, or sets

- Take any of the subsequent actions;
 - Use Windows' Alt-drag or Mac OS's Option-drag keys to move an action or instruction within the Actions panel. Once the desired point for the highlighted line is displayed, release the mouse button.
 - Select a command or action. Next, from the Actions window menu, choose **Duplicate**.
 - Transfer a command or action to the Actions panel's lower **Create New Action** button.

Using any of the identical techniques, you can make duplicate sets.

Eliminate commands, operations, or sets

- Select the command, set, or action from the Actions panel.

- Get any of the options below done;
 - Select the **Delete symbol** after bringing up the **Actions menu**. Click **OK** to confirm the deletion.
 - Users of Mac OS can Option-click the **Delete symbol**, while users of Windows can Alt-click it to erase the selection without showing a confirmation dialog box.
 - To delete an item without presenting a confirmation dialog box, shift the **selection to the Actions panel's Delete sign**.
 - Select **Delete from the Actions window menu**.

Remove an action or alter choices

- Within the Actions panel menu, choose **the action and then click Action Options**.
- Modify the action's set, function key layout, button color, and name.
- Select **OK**.

Control action sets

Sets of task-related operations that you can create, organize, and store on disk or move to different machines are also available. Keep in mind that while newly produced actions will appear immediately in the Actions window, you must save an action as a component of an action set in order to fully store it and avoid losing it in the event that you delete the file containing the Actions panel.

Keeping a set of actions

- Select **a set**. If you only need to save one action, drag it to the newly created action set after creating the action set.
- From the Actions window menu, choose **Save Actions**.
- Give the set a name, pick a location, and click **Save**. You have the option to save any place as well. It should be noted that individual actions cannot be saved in the Actions panel; only the entirety of a set can.

If the action set file is saved in the Presets/Actions directory, the set

will appear at the bottom of the Actions panel option once the application has restarted. Click Ctrl+Alt or just Command + Option after choosing the Save Actions command to save the actions in a file that is text-based. The details of an action can be viewed or printed using this file. Reloading the contents of the text document into Photoshop is not possible, though.

Organize action sets

To aid with task organization, you can create sets of activities and store them on disk. Sets of operations can be moved to other machines and arranged for various types of work, such web and print publication.

- To create a new set of actions, either click the **Create New Set icon** on the Actions panel or choose New Set from the window's menu. Next, type in the name of the set and click OK.
- You can move an action by dragging it to a new set. Once the highlighted line is where you want it to be, let go of **the mouse button**.
- Double-clicking an action's name in the Actions panel or choosing series Parameters from the Actions panel menu will allow you to rename the series. After that, type the new set name and select OK.
- Choose **Replace Actions** from the **Actions** window menu to add an additional collection of actions to the panel. Click **Load** after selecting an action file.

Take note that the Replace Actions function replaces every action set in the current document. Before executing the command, make sure you make a duplicate of the current set of activities using the Save activities command.

Artboards

You will be developing applications or websites for several devices more and more as a website or UX designer. Artboards facilitate the design procedure by offering an endless surface to showcase designs for different screens and devices. You can create your own custom artboard size or choose from a variety of preset sizes when creating

artboards.

Artboards help with design even if you are designing for a single screen size. Artboards, for instance, can be used for comparing and contrasting designs for various pages when creating a website.

Consider a board as a subset of a group of layers. The contents of any contained element are affixed to the margins of the artboard. The hierarchy of items in an artboard is displayed alongside layers or layer groups in the Layers panel. Layers or layer groups are allowed, but not additional artboards.

Artboards function as distinct visual canvases that are part of a document. Document artboards do not clip layers that are not part of them; instead, they are grouped at the highest point of the Layers panel.

Artboard preferences

To give your artboards a more distinctive appearance,

- Choose **Artboards from the Preferences > Interface > Appearance menu item.** The choice of the board's glossy color and whether to display or conceal the artboard borders is yours.

Design an artboard file

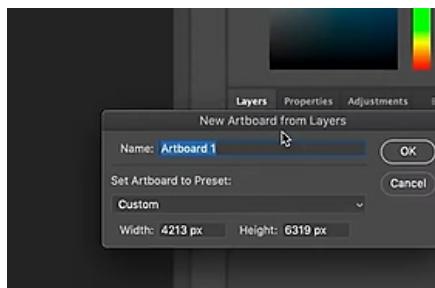
- In Photoshop, choose **File > New.**
- In the dialog box for New, **indicate a title for the file.**
- From the pop-up menu of the Document Type, choose **Artboard.**
- Select from the more than 35 presets for Artboard Size.
- Beginning with the artboard, add your design elements. Layer groups, smart objects, and other elements can be added to the artboard.

Create an artboard document from an existing document.

You may quickly create an artboard document from a conventional Photoshop document.

- Select **one or more of the document's layer groups or layers.**

- Choose between **Artboard From Group** or **Artboard From Layers** by performing a right-click on the selection.



Add artboards to the current document

- Select the **Artboard** tool by clicking on its icon in the Tools panel.
- On the canvas, draw the artboard.
- Adjust the artboard as necessary. Select a preset dimension from the **Size** display window on the tool options bar. Alternatively, you can continue to use the custom-size artboard.
- Give the artboard another name, and then do the following;
 - Select **Layer > Rename Artboard** once the selected artboard has been chosen.
 - After giving the artboard a new name, hit the Back button.
- Start adding your design components to the artboard. On the artboard, you can add layers, smart objects, layer groups, and other things.

Quickly add new artboards to a document

By selecting the Add buttons that appear next to the existing artboards, you can add more artboards to your project. The plus icons show up wherever on the canvas where more artboards can be added. To duplicate an artboard and all of its contents, use Option/Alt-click on a plus (+) icon.

- Choose an artboard.

- Choose the plus sign next to the artboard. After that, Photoshop will add an artboard to the document where the + icon is.

Work with artboards

Make a background for an artboard. In the Properties panel for the artboard (**Window > Properties**), enter the desired value in the Artboard Background Color field. You can also choose to make the transparency of the artboard background.

Move elements between artboards. Transfer the items on the canvas between the artboards. When you move an element between artboards in Photoshop, it attempts to locate it in the upper-left sections of the boards that are related to the ruler sources.

A newly inserted or relocated element moves to the highest point of the Layers panel's Z-order for that particular artboard.

You can also group elements/layers that aren't part of any artboard with other artboards that already exist. To select the desired artboard, just drag the canvas element. Another option is to drag it to the target artboard from the Layers panel.

Identical layers or groupings of layers When you have a duplicate layer or layer group in a document with artboards, you can choose which artboard you want to use for the cloned layer.

Choose an artboard by selecting its label and moving with the selected artboard or move tool. Next, **drag it to the desired spot on the canvas**.

Resize Select the label of an artboard by using the Artboard or Drag tool to select it. Next, from the artboard's tool choices menu, choose a new Preset Size.

Grids choose an artboard and click on **View > Show > Grid** to have a view of grids in an artboard.

Guides After selecting an artboard, transfer the ruler's directions to the canvas. At this point, these directions follow the artwork. Additionally, you will make a duplicate of an artboard using the designated guides so that the duplicate artboard has a unique set of guides. Alternatively, you might set up **View > New Guide Layout**

to focus on the preferred artboards. To configure the guide visibility choices, click on **View > Show**.

Identify artboard names. Select **View > see > Artboard Names** to see or hide the names of the artboards. It automatically trims artboard names to match the dimension of the artboard.

Layer filters based on artboard from the Layers panel, select Artboard using the Search pop-up box. Select a layer within an artboard or an artboard itself. The artboard that is now selected is the only one that can be seen in the Layers panel. To get back to the entire Layers panel view, deselect all of the layers or choose an item outside of the artboard.

Stop auto-nesting within or outside of artboards. Attach the illustration's lock to an artboard to stop it from automatically clustering within and out of it, or to specific layers within an artboard to stop those layers from automatically nesting.

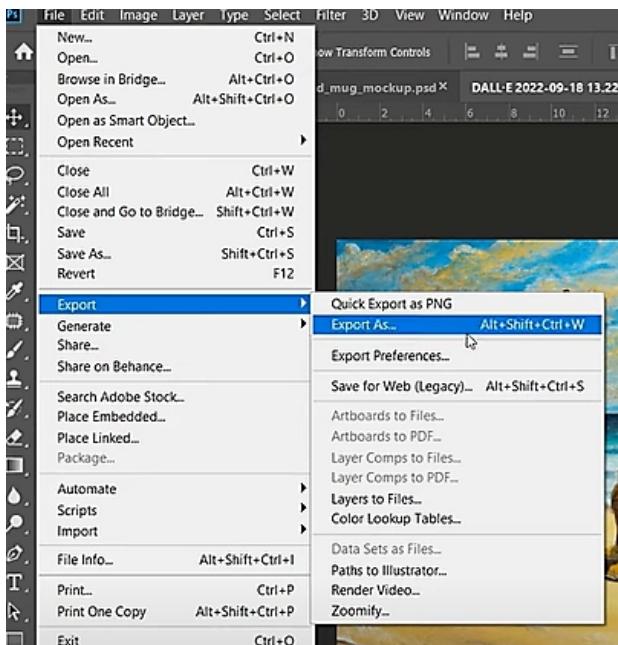
Rename To add a new name, double-click on the board within the Layers window. Use the **Layer > Rename Artboard** instruction as an option.

Eliminate artboards Artboards are easily broken down into their component parts. After selecting the artboards, choose **Layer > Ungroup Artboards**. The artboards disappear, and every single item that makes them moves up a notch in the Layers window. The file becomes a non-artboard document if the final piece of artboard is removed or ungrouped.

Export artwork to PDF format.

Artboards can be exported as PDF files. Proceed as directed below;

- In Photoshop, choose **File > Export > Artboards To PDF**.



- Complete the following actions in the Artboards To PDF window box;
 - Select the location/destination where you wish to save the created PDF documents.
 - For the generated PDF files, set a prefix for the file name.
 - Select whether to export content that overlaps the artboards or just the stuff that is on the artboards.
 - Select which artboards you want to export, or export all of them.
 - Choose whether you want to export the backgrounds from the artboards together with the artboards.
 - Select whether to create one PDF file for each artboard or one PDF file for every artboard in the current document. In the event that you choose to create multiple PDF documents, each one will have the document's name prefix you previously specified.
 - Choose an encoding for the produced PDF files: ZIP

or JPEG. If you select JPEG, you must additionally provide a Quality option (0-12).

- Select whether the International **Color Consortium (ICC) Profile should be included in the generated PDF documents.** An ICC profile is a set of data that describes a color input or output device.
- Select if you wish to export the names of the artboards along with the artboards. This option allows you to choose a custom font along with its size, color, and canvas extension color.

● Select **Run**. Photoshop will then generate the PDF document.

Export artboards as files

Artboards can be exported as individual files if desired. Proceed as directed below;

- In Photoshop, choose **File > Export > Artboards To Files**.
- In the Artboards To Files dialog, implement the instructions below;
 - Select the location where the created files should be saved.
 - Enter a **file name prefix**.
 - Choose whether to export solely the artboard content or the overlapping areas.
 - Choose whether to transfer all artboards or just the ones you've selected.
 - Select if you wish to send artboard backgrounds in addition to the artboards.
 - Choose the type of file you wish to export. Your files can be saved in Targa, TIFF, PNG-8, PNG-24, JPEG, PDF, or PSD formats.
 - Set the export choices for the file type you've chosen.
- Select **Run**. Photoshop will then export the artboards as files in the chosen format.

Activity

1. What is a frame tool?
2. Play and manage your actions in the video you created.
3. What are artboards in Photoshop? Create an artboard.

Chapter 21

Printing in Photoshop

Whether you're printing a picture on a desktop printer or sending it to a prepress facility, understanding a few printing essentials lets the work go more smoothly and helps guarantee that the finished image looks as intended.

Types of printing For many Photoshop users, printing a file means putting the picture on an inkjet printer. Photoshop can convert your photo to a negative or positive film picture or transfer it to a number of different media to ensure it can be published directly onto paper. In the latter case, the film can be utilized to create a master sheet for publishing using a mechanical press.

Types of Pictures For instance, line art only employs one color at a single grayscale level. In a more advanced image, like a photograph, color tones change. We call this kind of image a continuous tone.

Separation of colors Multicolored artwork meant for commercial printing needs to be created on separate master sheets, one for each color. The process of color separation calls for the use of CMYK (cyan, magenta, yellow, and black) inks. In Photoshop, you can modify the way that the different plates are created.

Level of detail The image resolution (measured in pixels per inch) and printer resolution (measured in dots per inch) affect how detailed a printed image will be. PostScript imagesetters can achieve resolutions of 1200 dpi or more, whereas most PostScript laser printers can achieve resolutions of 600 dpi or more. Rather than producing actual dots, inkjet printers produce a fine spray of ink, with a resolution of 300 to 720 dpi.

About desktop printing

It is quite likely that you print photos to a desktop printer—such as an inkjet, or laser printer—rather than an imagesetter unless you work for a commercial publishing company or service bureau. You can control the printing of your image with Photoshop.

In contrast to desktop printers, which reproduce images using inks, dyes, or pigments, monitors display images using light. Because of this, not all of the colors displayed on a monitor can be reproduced by a desktop printer. However, by implementing some strategies, such as a color management system, into your workflow, you may print your photographs to a desktop printer with consistent results. Make sure to take these things into account while dealing with an image that you intend to print;

- When printing to a desktop printer, be sure the document is not converted to CMYK mode if your image is in RGB mode. Finish the task entirely in GRB mode. Generally speaking, desktop printers are set up to accept RGB input and convert it using internal software, which can produce inconsistent results.
- Use the Proof Colors instruction if you need to see an image as it will print on any device where you have a profile.
- If you want to accurately replicate screen colors on printed pages, you need to incorporate color management into your process. Utilize a monitor that has been calibrated and described. While the printer's default profile can yield satisfactory results, you should create a custom profile specifically for your printer including the material that you print on.

Print images

The File menu of Photoshop provides the following printing commands;

Print brings up the Print Dialog window so you can modify the print and see the outcome. Customized options are often saved as new defaults when you choose Done or Print.

Print One Copy With this option, a file copy can be printed without a dialog box being displayed.

Change the print settings in Photoshop and print.

- Select File > Print.



- Select the layout orientation, printer, and quantity of copies.
- Select the desired paper size and orientation, then visibly resize and reposition the image in the left preview window. Or else configure individual properties on the right side for Print Marks, Color Management, as well as Location and Size, etc.
- Take any of the subsequent actions;
 - Choose **Print** to have the image printed.
 - Choose **Cancel** in order to have the dialog box closed without a need to save the options.

Place and resize the pictures

The Print window has options to adjust the placement and scale of an image. The colored border surrounding the page's edge reflects the paper's margins, while the printed region is white.

The document size settings in the Size of Images window determine the base output size of an image. When it comes to published images, the scaling option of the Print dialog box modifies the size and resolution of the image. The document size settings in the

picture size dialog box will remain the same, however, a picture resized to 50% in the Print window's box from 72 ppi will print at 144 ppi. The Print Resolution area is at the bottom of the Print window's box.

Several third-party printer drivers provide the option of scaling in the Print Settings window's box. On the other hand, page marks remain the same size regardless of the scaling % that the Print command applies, which just modifies the dimension of the printed image. Everything on the document is affected by this scaling, including the dimensions of all page markers like crop marks and comments.

Reposition an image on the paper

- After choosing **File > Print**, expand the Location and Size options on the right. When done, choose one of the following actions:
 - To center the picture in the printing area, select **Center Image**.
 - The image can be placed numerically by deselecting the **Center Picture** and then entering numbers for the Top and Left.
 - Once the image is in the preview window, deselect **Center Image**.

Scale the print size of an image

- Select **File > Print**, and enlarge the Position And Size configurations on the right side. Then get any of the following done;
 - You just need to choose **Scale To Fit Media** so that the picture will fit on the chosen paper within the required printing area.
 - Select "**Scale To Fit Media**" to deselect it and enter the image's width, height, and scale settings to resize it numerically.
 - Grab the bounding box in the preview pane and move it around the picture to get the right size.

If an error message appears stating that your picture exceeds the printable area of the paper, select Cancel. Proceed to **File > Print**, then expand the **Location And Size** choices on the right to select **Scale To Fit Media**.

Print art of an image

- Determine the feature of the image you want to print by using the **Rectangle Marquee tool**.
- Go to **File > Print** and select the option to **Print Selected Area**.
- You can modify the selected region by moving the triangle handles across the perimeter of the print preview.
- Select **Print**.

Print vector data

Photoshop may direct vector graphics, including shapes and letters, from a photograph to PostScript printers. Every type layer and every vector form layer that Adobe adds to an image is printed as a separate picture. Using their vector shapes, the supplemental images are clipped and printed over the main image. Therefore, even if the resolution of the picture file limits the information of each layer, the edges of vector graphics print at the utmost resolution achievable on your printer.

- Choose **Print under File**.
- Expand the **PostScript choices** by navigating to the bottom of the options box located on the right.
- Choose **Include Vector Data**.

Color settings

For most color-managed workflows, it is advisable to use an Adobe-tested preset color option. Changing individual choices is only advised if you are well-versed in color management and are confident in the adjustments you make.

Options can be saved as presets after they have been customized. Color settings are saved so that they can be reused and shared with other users or programs.

- To save color sets as a preset, choose the store option in the Color Configuration dialog box. If you want to be sure the application shows your setting description in the preferences for colors window box, make sure that the document is saved in the default location. If you save the file to a new location, you have to load it before choosing the configuration.
- Select **Load** in the **Color Configuration** window's box, select the file you want to store, and then select **Open to load a color setting** preset that hasn't been saved in the default location.

Keep in mind that you cannot preserve specific color preferences in Acrobat. To share personalized color settings with Acrobat, create a document in InDesign, Illustrator, or Photoshop and store it in the Settings folder. It will then show up in the Preferences dialog box's Color Management category. An additional method is to manually add settings to the standard Settings folder.

Color working spaces

A workspace is the word for the intermediate color space that Adobe products use for color specification and manipulation. There is a working space pattern for each model. Choose a working space setting using the Color Configuration dialog box.

The working area profile is the source profile for documents that are prepared using the related color model. If Adobe RGB (1998) is the presently selected RGB working space profile, colors from that gamut will be used in every new RGB document you produce. The work environments can have an impact on the colors that show up in untagged documents.

When you view a document with an integrated color profile that differs from the working area's profile, the software uses a color management rule to decide how to manage the color data. The integrated profile is maintained as the standard policy for the most part.

Working space choices

In Photoshop, select **Edit > Color Settings** to see the workspaces that are available. In Acrobat, click the Preferences window and choose Color Management. Once a profile has been chosen, move

the mouse over its name to see a description. The description will then appear in the lower portion of the dialog box.

RGB determines the RGB color space that the application will use; in general, Adobe RGB or sRGB are preferred over device-specific profiles (such as display profiles). As sRGB specifies the color space of the typical monitor used to view photographs online, it is advised to use it while producing photos for the web. Because sRGB is typically used by consumer-level digital cameras, it's also a great choice when working with photographs shot with these types of cameras.

Adobe RGB is advised for preparing documents for printing since it has a gamut that includes some usable colors (especially blues and cyan) that sRGB is unable to set. Since most professional digital cameras utilize Adobe RGB as their standard color space, Adobe RGB is also a great option for working with their photos.

CMYK This establishes the application's CMYK color space. Every CMYK workspace is typically device-based, which implies that the specific link and paper pairings are required. The CMYK workspaces provided by Adobe are contingent upon typical commercial print conditions.

Gray establishes the application's grayscale color space.

Spot indicates the dot grain to make use of when showing spot color channels and duotones.

Software from Adobe comes with a standard set of working region profiles that are evaluated and approved for the majority of color management operations. Only these profiles are displayed by default in the working space settings. If your computer has more installed color profiles, choose Additional Options to examine them. In order to be displayed in the working space menus, a color profile must be bidirectional.

Missing and mismatched color profiles

For a newly produced document, the color procedure typically proceeds without a hitch: Colors are created and modified using the working space profile linked to the document's color mode unless otherwise specified.

On the other hand, certain existing documents might not be color-

managed and may not utilize the working space pattern that you have defined. Common deviations from your color-managed approach include the following:

- Create a document or import color information (by copying, pasting, moving, and dropping, for example) from a file that isn't tagged with a profile. Usually, this happens when you open a document that was prepared in an application that is unable to support color management.
- You can open a document that has been labeled with a different profile than the workspace, or you can import color data from a document. This can occur when you open a document that was scanned and annotated using a scanner profile, or prepared using a variety of color management presets.

In both cases, a color management rule is used by the program to determine how it will manage the color information in the document.

Depending on the settings you select in the Color Settings dialog box, the application might show an error message if the profile does not exist or is not compatible with the workspace. Profile warnings are off by default, but you can enable them to ensure that every page is correctly colored. Though the alerts differ depending on the program, typically you have the options listed below:

(Recommended)Leave the imported color data document in its current state. For example, you can choose to maintain the numbers in copied color data, utilize the incorporated profile (if you have one), or leave the file without a color characteristic (if one does not exist).

Make changes to the document or add color images. For instance, when you open a document without a color profile, you can select to attach the workspace profile that is currently being used or a different one. You can set a document's color scheme to correspond with the workspace when it opens, or you can opt to erase the document's mismatched color profile. When integrating color data into the current working environment, you have the option to convert colors if you want to preserve the visual appeal of the data.

Options for color management policies

The color management rule specifies how the program handles color data when you open a file or import an image. You can specify different guidelines for RGB and CMYK pictures, as well as the timing of alert messages.

- To view the options for color management policies, choose Edit > Color Settings.



RGB, CMYK, And Gray This choice indicates a rule to follow when importing colors to the working space in use; this can be done by either launching files or bringing images to the current document. Make your preferred choice from the subsequent choices;

Preserve Embedded Profiles File opening consistently maintains the contained color profiles. For most workflows, this is the best solution because it allows for constant color management. Save Numbers (Ignore Linked Profiles) is the appropriate option if you wish to store CMYK numbers, as there is one exception.

Convert To Working Space When opening files and bringing in photos, colors are converted to the profile of the active working workspace. If you need to be sure that every hue uses only one profile, then select this option.

Off This option removes the working space from newly created documents and uses inherently embedded color profiles when opening files and bringing in photos. If you want to remove any color metadata that the primary

document creator has provided, select this option.

Profile Mismatches Open a document marked with an account other than the one you are using right now, and you will see a notification asking you to "Ask When Opening." This allows you to override the default behavior of the policy and ensure that every document is appropriately managed with regard to color.

Missing Profiles shows a message anytime you open a file that is not named. You will be provided with the choice to override the default behavior of the policy. Choose this option if there is a need for you to be sure of the right color management of documents in each case.

Color conversion options

Color translation You can control how the program handles colors in a document as it transitions between different color spaces by using these settings. It is advised that you adjust these parameters only if you have experience with color management and are confident in the adjustments you make. Choose **Edit > Color Settings, then click More Possibilities** (Photoshop) to see the conversion possibilities. Select the Color Management option from the Preferences window in Adobe Acrobat.

The Color Management Module (CMM), which is used to change the gamut from one color space to another, is specified by the engine. The majority of customers' conversion needs are met by default by the Adobe (ACE) engine.

Advanced Photoshop controls

- Select **Edit > Color Settings** to see Advanced Controls so that you can control the colors in Photoshop.

Dim the color of the monitor. The preset degree of desaturation is applied to colors when they are displayed on the monitor. When enabled, this option can assist you in seeing all color spaces using gamuts bigger than your monitor. However, this results in an imbalance between what comes out and the display on the monitor. Rejecting this choice may result in the image's different hues appearing as one color.

Merge RGB colors When layer painting or mixing in Normal mode, for example, gamma influences how RGB colors merge to form composite data. This option blends RGB colors in the color space corresponding to the specified gamma value. When the gamma is one, "colorimetrically correct" implies that there should be the least amount of edge artifacts.

Identify out-of-gamut colors

The range of colors that can be printed or displayed by a color system is known as a gamut. It is possible to argue that a hue that appears in RGB is beyond the gamut, which means it cannot be reproduced on your device in CMYK. To ascertain if a hue in RGB format is out of gamut, apply the following methods:

- In the info panel, you will see an exclamation point close to the CMYK values each time you drag the cursor over an out-of-gamut color.
- You'll notice an alert triangle in the Color panel and the Color Picker. If you select a color that is not in the color gamut, the closest CMYK similar will be displayed. Select the color patch or the triangle to determine the **CMYK equivalent**.

In Photoshop, converting an RGB picture to CMYK instantaneously gathers all colors into the gamut. It is important to note that depending on your converting options, some visual information may be lost. A picture's out-of-gamut colors can be specified or manually fixed before it is converted to CMYK. To indicate colors that are not in the gamut, you can also employ the Gamut Warning command.

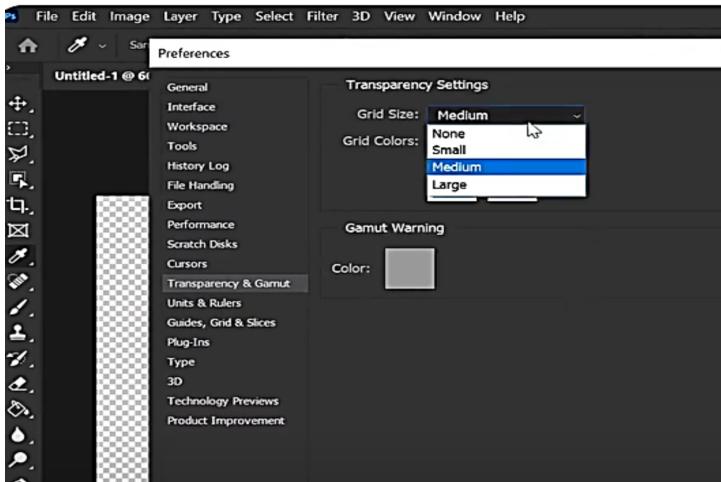
Find out-of-gamut colors

- To choose the proof profile that will serve as the basis for the gamut warning, select **View > Proof Setup**.
- To see the Gamut Warning, click **View**.

The present proof profile space's outer pixels will all have their gray highlights applied to them.

Alter the color of the gamut warning

For Windows Navigate to Transparency & Gamut under Preferences > Edit.



- Mac OS Select Transparency & Gamut under Preferences > Photoshop.
- Selecting the color box will cause the Color Picker menu to open when you get the Gamut warning. Next, choose a different caution color, and click OK. Include the color that isn't already in the image for the best impact.
- When the Opacity section has a value entered, click OK. Using this option, you can modify the warning color to display either a portion or all of the lower graphics. Keep in mind that the value range is from 1% to 100%.

Understanding Neural Filters

With the help of machine learning enabled by Adobe Sensei, Neural Filters is an entirely novel workspace in Photoshop that offers a range of filters that significantly reduce complex tasks to a few clicks. With the help of Neural Filter, you may quickly generate original ideas by experimenting with non-destructive, generative filters. Neural filters enhance your images by generating new relevant pixels that were never in the original picture.

To begin, obtain the filters stored in the cloud and make the

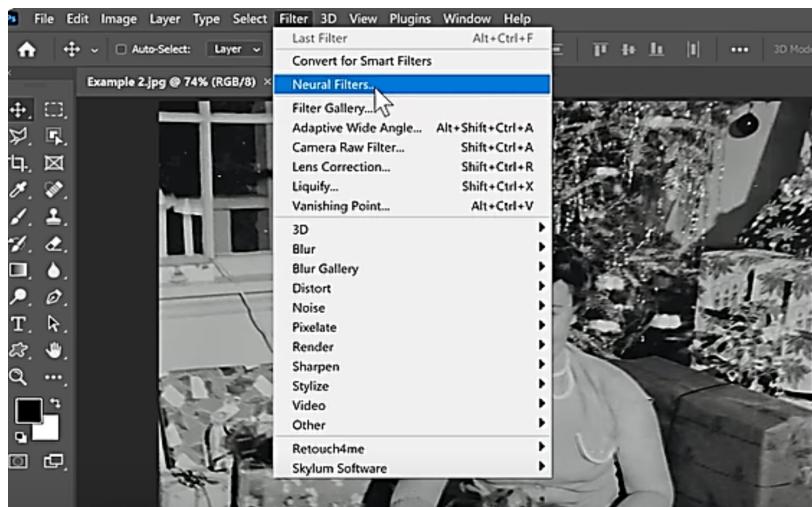
necessary adjustments. To view the beta and highlighted filters in the Neural Filters panel, select **Filter > Neural Filters**.

You can locate all the neural filters, beta or featured, conveniently located under the Neural Filters panel.

- Select **Filter > Neural Filters**, then the All Filters tab. Additionally, you can vote for the filters you would want to see added in the future.

Utilize Photoshop's Neural Filters by following these three simple steps;

- Access Neural Filters; locate **Filter > Neural Filters**.



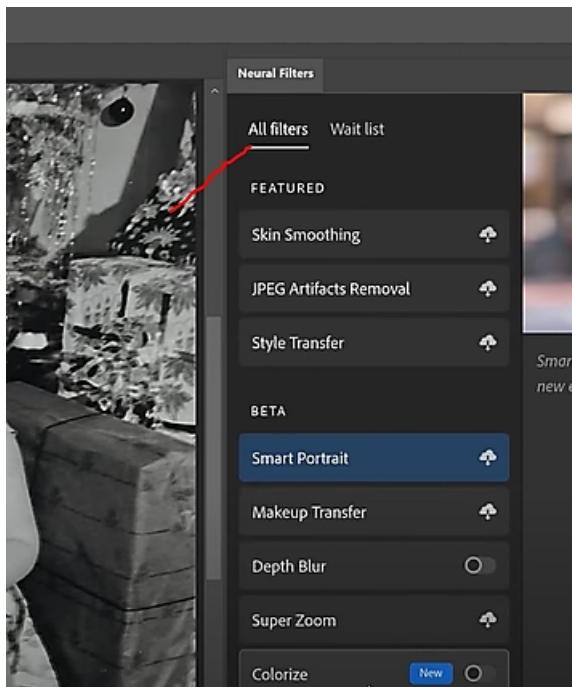
You can choose to utilize any or all of the filters mentioned under All Filters in the Neural Filter panel that appears.

- Get the required cloud filters by downloading them. If a filter has a cloud symbol next to it, you must obtain it from the cloud before using it for the first time. Select the cloud icon to start downloading all the filters you wish to use.
- Turn on the filter, make the necessary adjustments, and use the options in the panel on the right to achieve the desired result.

Neural Filters categories

Photoshop offers three different types of Neural Filters:

- **Featured:** The results of these filters meet stringent criteria and comply with laws pertaining to identity preservation, inclusivity, and compliance. Go to **Filter > Neural Filters > All Filters** select a neural filter from the list that is highlighted, and apply it.



- **Beta:** It is now possible to evaluate these filters. Models and processes for machine learning are continuously improved. Please be advised that when utilizing and testing these filters, unexpected results can occur. Select a neural filter from the list to use as a featured filter by going to **Filter > Neural Filters > All Filters > Beta**.
- **Wait List:** These kinds of filters are not available now, but they may be in the next few years. To learn more about what's in store, select any name from the list beneath **Filter > Neural Filters > Waitlist**. By clicking the "I'm Interested" icon after choosing the filter name, you can choose your preferred filters!

Activity

1. Print an image
2. What is a gamut and how can you find out-of-gamut colors?
3. What are Neural Filters?

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